

19980318.qrp v01_n033.qrs.980318

Date: Wed, 18 Mar 1998 19:03:13 EST
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 1033

QRP-L Digest 1033

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- 2) [6234] Fox contacts
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- 3) [6235] Re: Antenna
by "Jim Barrett" <jbarrett@stny.lrun.com>
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- 7) [6239] Re: IC706MK II Observations (long)
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- 8) [6240] Fox Results W03B
by "Bob White" <bobwhite@accesscom.com>
- 9) [6241] Oh no! My chirp is back & the fox evaporated!
by "Jim Francoeur KC1FB" <jim_kc1fb@pipeline.com>
- 10) [6242] HW-8 article
by Frank <frank001@postoffice.worldnet.att.net>
- 11) [6243] Re: IC706MK II Observations (long)
by Tim Ahrens <tahrens@inetport.com>
- 12) [6244] SG-2020 Delivery Schedule Delayed, AGAIN!!!
by Bill Todd <bill@willapabay.org>
- 13) [6245] re: Update on No Sound in PC (Super Morse) NEED YOUR HELP!
by Chuck and Michele Snyder <csnyder@nextdim.com>
- 14) [6246] Re: HW-8 article
by Paul Harden <pharden@aoc.nrao.edu>
- 15) [6247] Milestone now has Nye keys
by "Marshall Emm" <mgemm@mtechnologies.com>
- 16) [6248] DB-25 Connector and Pinouts
by Chuck and Michele Snyder <csnyder@nextdim.com>
- 17) [6249] website update
by "duane" <duane@flinet.com>
- 18) [6250] New 38-S: the 44-MAGNUM
by Paul Harden <na5n@rt66.com>
- 19) [6251] Oscope - read first

- by Paul Harden <na5n@rt66.com>
- 20) [6252] Oscopes-1
by Paul Harden <na5n@rt66.com>
- 21) [6253] Oscopes-2
by Paul Harden <na5n@rt66.com>
- 22) [6254] Oscopes-3
by Paul Harden <na5n@rt66.com>
- 23) [6255] Oscopes-4
by Paul Harden <na5n@rt66.com>
- 24) [6256] New QRP Book
by SABorns <SABorns@aol.com>
- 25) [6257] QRP WAC Award
by Joe Gervais <vole@primenet.com>
- 26) [6258] Re: SG-2020 Delivery Schedule Delayed, AGAIN!!!
by Frank G3YCC <g3ycc@g3ycc.prestel.co.uk>
- 27) [6259] High flying antenna
by Frank G3YCC <g3ycc@g3ycc.prestel.co.uk>
- 28) [6260] NE QRP 98 Meeting report and Photos online!
by Dquagliana <Dquagliana@aol.com>
- 29) [6261] Fluke RF probe summary...
by Conrad <radman@best.com>
- 30) [6262] Pictures on Web Page
by N4JS <n4js@pobox.com>
- 31) [6263] For Swap
by "Harry Hurst" <hhurst@delaware.infi.net>
- 32) [6264] Re: QSB, what to NOT do in a QSO
by Bob Patten <n4bp@bc.seflin.org>
- 33) [6265] toroid wire
by NF9K <NF9K@aol.com>
- 34) [6266] FS Ten Tec C21
by Gary Wilcox <rwilcox@newton.cacky.com>
- 35) [6267] Elmer101 / SW-40+ update
by Bensondj <Bensondj@aol.com>
- 36) [6268] Re: SG-2020 Delivery Schedule Delayed, AGAIN!!!
by "Walter Dufrain" <walter@inlink.com>
- 37) [6269] Re: HW-8 article
by "Buck Switzer" <n8cqa@tir.com>
- 38) [6270] Antennas from a hotel
by "Brian Jones" <brian_jones@uk.ibm.com>
- 39) [6271] FoxHunt In the Rain and Green
by "James R. Duffey" <ji3m@maxwell.com>
- 40) [6272] Re: toroid wire
by Mike - W0TMW <crucis@sky.net>
- 41) [6273] Re: SG-2020 Delivery Schedule Delayed, AGAIN!!!
by Vic Rosenthal <rakefet@rakefet.com>
- 42) [6274] FoxHunt In the Rain and Green
by "W. D. (Doc) Lindsey" <70511.3041@compuserve.com>
- 43) [6275] Re: SG-2020 Delivery Schedule Delayed, AGAIN!!!

by Michael Neverdosky <MichaelN@cycat.com>
44) [6276] MFJ DSP
by EBikales <EBikales@aol.com>
45) [6277] Wilderness Sierra For Sale
by George Zafiropoulos <georgez@quickturn.com>
46) [6278] Re: A visitor from the West to NE QRP
by adams@chuck.dallas.sgi.com (Chuck Adams)
47) [6279] Re: KK6MC/5 Fox
by Tellefsen Bob-CNSE97 <cnse97@lmpsil02.comm.mot.com>
48) [6280] RIGS: SIMPLE WORKS TOO!
by ARDUJENSKI <ARDUJENSKI@aol.com>
49) [6281] Copperweld wire
by Tellefsen Bob-CNSE97 <cnse97@lmpsil02.comm.mot.com>
50) [6282] Re: SG-2020 Delivery Schedule Delayed, AGAIN!
by Joe Gervais <vole@primenet.com>
51) [6283] RE: New 38-S: the 44-MAGNUM
by Andreas Junge <andreas@atltech.com>
52) [6284] Re: IC706MK II
by Tellefsen Bob-CNSE97 <cnse97@lmpsil02.comm.mot.com>
53) [6285] Autek QF-1A, one of my all-time favorites
by "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
54) [6286] Re: QRP Trivia
by Tellefsen Bob-CNSE97 <cnse97@lmpsil02.comm.mot.com>
55) [6287] RUFZ cw
by dave_epps@juno.com
56) [6288] Re: SG-2020 Delivery Schedule Delayed, AGAIN!!!
by Ed Tanton <n4xy@bellsouth.net>
57) [6289] Re: SG-2020 Delivery Schedule Delayed, AGAIN!
by "J. Skalski" <jskalski@acsu.buffalo.edu>
58) [6290] Squeeze mode A or B?
by ea8yu Goran <rodriguez@jet.es>
59) [6291] Re: Autek audio filter
by "CHARLES LESKIE" <CLESKIE@um-f1.umd.umich.edu>
60) [6292] Re: RUFZ cw
by DENNIS MO <DENNISMO@aol.com>
61) [6293] Re: 4/98 QST QRP trivia
by Zack Lau <zlau@arrl.org>
62) [6294] Re: New 38-S: the 44-MAGNUM
by Roger Hightower <n7kt@earthlink.net>
63) [6295] Re: Milestone now has Nye keys
by Ed Tanton <n4xy@bellsouth.net>
64) [6296] Re: Squeeze mode A or B?
by Monte Stark <ku7y@dri.edu>
65) [6297] [Fwd: Code practice Oscillator]
by David Whipple <busmana@xmission.com>
66) [6298] Re: Audio thru PC speaker
by Bill Howell <bhowell@mail.utexas.edu>
67) [6299] A NEVER ENDING STORY... THE SG2020 delivery date...

by Stefan Bauer <bauer@student.uni-kassel.de>
68) [6300] Re: Milestone now has Nye keys
by "George T. Baker" <w5yr@swbell.net>
69) [6301] New Tools from Milestone Technologies
by "Marshall Emm" <mgemm@mtechnologies.com>
70) [6302] Re: FoxHunt In the Rain and Green
by "George T. Baker" <w5yr@swbell.net>
71) [6303] Re: Milestone now has Nye keys
by "Marshall Emm" <mgemm@mtechnologies.com>
72) [6304] Re: RUFZ cw
by Stanley Wilson <microres@crl.com>
73) [6305] Re: Autek audio filter
by Stanley Wilson <microres@crl.com>
74) [6306] Re: RIGS: SIMPLE WORKS TOO!
by Mike Souhrada <wb9iog@revealed.net>
75) [6307] 40M KnightSMiTe
by "Bob Kellogg" <ae4ic@nr.infi.net>
76) [6308] Re: [Fwd: Code practice Oscillator]
by "Tim, KD5CKP" <Prog922@worldnet.att.net>
77) [6309] Caps in Sierra Band Modules
by Rick McNelly <72507.235@compuserve.com>
78) [6310] Versa tuner and qrp...
by kd4zkw <kd4zkw@amsat.org>
79) [6311] Suggested \$\$ for an Argosy 505?
by "John D. Erskine" <yd794@victoria.tc.ca>
80) [6312] Re: High flying antenna
by Steven Weber <kd1jv@moose.ncia.net>
81) [6313] opinions on kits
by kd4zkw <kd4zkw@amsat.org>
82) [6314] RE: [Fwd: Code practice Oscillator]
by Conrad <radman@best.com>
83) [6315] QRP DX
by Ward Hill <w_hill@ns.net>
84) [6316] Re: High flying antenna
by LYN WILLIAMS <designserv@ipass.net>
85) [6317] Cheap DMM
by dave_epps@juno.com
86) [6318] Re: RIGS: SIMPLE WORKS TOO!
by K5BDZ <K5BDZ@aol.com>
87) [6319] Making dead lines, Dilbert in real life
by Steven Weber <kd1jv@moose.ncia.net>
88) [6320] Re: Versa tuner and qrp...
by K5BDZ <K5BDZ@aol.com>
89) [6321] Re: Autek audio filter
by K5BDZ <K5BDZ@aol.com>
90) [6322] Fluke RF Probes - - The BEST deal yet!!!
by Dale Scott <dcscott@us.ibm.com>
91) [6323] Re: Milestone now has Nye keys & Spelling..

by DENNIS MO <DENNISMO@aol.com>
92) [6324] Novice/Tech+ Sprint
by "Bob Edwards, W4ED" <w4ed@flash.net>

Date: Tue, 17 Mar 1998 19:34:47 EST
From: K4NK <K4NK@aol.com>
To: qrp-1@Lehigh.EDU
Subject: [6233] help wid old rig
Message-ID: <35828327.350f16a8@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Hello Gang;

I have aquired several old QRP type kits but have no paper work with them. I would very much like to Identify these and get them working. First is a 75 Mtr SSB rx board kit info I have says Doug DeMaw QST project around 1986. Next is an old three board set 40 mtr xcvr. Info says by small parts ctr . early kit . Has a rx board ,tx board and a relay board. possibly sold by KM8? . I would like very much to get any paper work on these . I of course would pay for all cost.

Thanks

72 K4NK

K4NK@aol.com

Date: Tue, 17 Mar 1998 18:26:23 +0000
From: Roger Hightower <n7kt@earthlink.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [6234] Fox contacts
Message-ID: <350EC04F.166CCC01@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

PLEASE, folks. Only one contact per person. If you change your rig or antenna after making a contact, please don't jump in again. It just adds to the QRM.

--

72/73, de Roger, N7KT

Date: Tue, 17 Mar 1998 17:52:05 -0500
From: "Jim Barrett" <jbarrett@stny.lrun.com>
To: "Tellefsen Bob-CNSE97" <cnse97@lmpsil02.comm.mot.com>
Cc: <qrp-l@Lehigh.EDU>
Subject: [6235] Re: Antenna
Message-ID: <007201bd51f7\$4f322420\$2381d2cc@default.stny.lrun.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

-----Original Message-----

From: Tellefsen Bob-CNSE97 <cnse97@lmpsil02.comm.mot.com>
To: jbarrett@stny.lrun.com <jbarrett@stny.lrun.com>
Cc: QRP-L list <QRP-L@Lehigh.Edu>
Date: Tuesday, March 17, 1998 13:16
Subject: Antenna

>Jim (KC2DCC):
>Welcome to Wonderland :-). Lot's of hams have been wondering, why have
>I been QRO all these years?

Thanks for the welcome!

>
>Got an idea that might be worth your trying. Like you, I got into QRP
>seriously due to TVI, long before cable came into our neighborhood.
>
>If you could make a balanced antenna, it might help reduce any TVI
>tendencies further. It wouldn't necessarily have to be a classic dipole
>with feedline out to the center. The idea is to have a centerfed
>antenna with two equal halves, not necessarily resonant, but it might
>help. It could even be in the shape of a v, at least 90 degree angle
>though. This gets all the radiation outside the house, even if the
>feedpoint is right at the wall or window. Such an antenna is ground
>independent, and will couple less into your building wiring.
>

I've just installed three dipoles in the attic above my apartment (I'm fortunate in that the access trapdoor is in my unit). One for 20 meters, one for 15 and one for 10. Each is fed with a separate coax, and each has a 1:1 current balun at the feed point. These have cut down the TVI tremendously. I can now get up to about 60 watts before any adverse effects are noted on my own television. The adjacent upper-floor apartment is empty at the moment,

and is farther away in any case.

Not that I'd be inclined to use 60 watts! 6, perhaps, but not 60...

The configuration of my building, (and available support structures), limit me to the end-fed wire for an "outside" skyhook. We're really not supposed to have any antennas at all here, but the wire is next-to-invisible unless you know right where to look.

This weekend, I'm going to run a counterpoise from just below where the wire enters the window, horizontally down the length of the building. There's a natural "slot" between two courses of bricks that will be an ideal place to mount it... shouldn't be visible at all from ground level. Even with a less-than-optimal ground system, I've been getting out well on 80 and 40 with around 50 watts. Snagged Alaska the other night on 3.718 with a 589 report. It was extremely quiet that evening, but 80 & 40 have been very QRN-ish here every night since.

I've been listening to 15 meters this afternoon on a general coverage receiver I keep here at work. The 21.150 propagation beacon YV5B in Venezuela has been booming in here in the Northeast. I can hear each of the stepped-power dashes clearly right down to 100 mw. QRP into Northern S.A. would be a breeze at the moment... too bad the rig is at home!

73

Jim Barrett - KC2DCC

Date: Tue, 17 Mar 1998 21:31:13 EST
From: wa8rxi@juno.com (Rick Arzadon)
To: qrp-l@Lehigh.EDU
Subject: [6236] My First FOX
Message-ID: <19980318.023724.4775.0.WA8RXI@juno.com>

Jim,
Gotcha with 2W from my OHR Classic. Thanks for my first pelt!
With your excellant operating and listening a lil off frequency (and off the QRM) you were able to reel us in quite well.
Thanks again es
72, Rick Arzadon - WA8RXI Taylor, MI.
[QRP-L #1368][ARCI #9050][MI-QRP #587][G-QRP #9125][HI-QRP #32]

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Get completely free e-mail from Juno at <http://www.juno.com>
Or call Juno at (800) 654-JUNO [654-5866]

Date: Tue, 17 Mar 1998 22:00:50 -0500
From: Paul Stroud <aa4xx@ipass.net>
To: klqrp <klqrp@waterw.com>
Cc: QRP-L <QRP-L@Lehigh.EDU>, Don Shipman W3RDF <DLShips@aol.com>
Subject: [6237] W3RDF Core Banks Beacon Schedule
Message-ID: <350F38E2.28206741@ipass.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Gang,

Don has worked up the following beacon schedule. As you can see,
he has given a lot of thought and planning to this beacon project.
Thanks for the VFB job, Don.

We also wish to express our thanks to Jerry Flanders, W4UK, who
will be printing the beacon certificates for us.

In order to balance the QSL duties between the beacon project and
the "regular contacts," AB4PP will be our official QSL Manager, with
AA4XX handling all beacon related confirmations.

This information will be incorporated into our website within the next
day or so. We wish you all happy hunting!

BEACON SETUP

Beacon transmitters will be operating from Core Banks Island, North
Carolina
from 19:00Z, March 27, 1998 until 15:00Z, March 29, 1998. All beacon
transmitters will operate at power levels less than one (1) watt and in
most
cases less than 500 mW. There will be three classes of beacons: 1) Known
Frequency, 2) Haystack, 3) Wild Card. Operating times and frequencies
can be
found in the beacon schedule.

Haystack Beacons are to be found somewhere within a specified frequency range given in the beacon schedule. Haystack beacons will be operated on the 80, 40, 30, and 20 meter bands. All Haystack beacons will be using ground based vertical antennas at the edge of the Atlantic Ocean. These beacons will use the call WQ4RP/qrpp and will have the word "ground" embedded somewhere within the beacon message.

Known Frequency Beacons are to be found within (+/- 1 kHz) of the frequency given in the beacon schedule. Known frequency beacons will be operated in the 40, 30, 20, 15 and 10 meter bands. Most Known Frequency Beacons will be operated from kite based antennas several hundred feet above the ground. These beacons will be identified by the call WQ4RP/qrpp and will have the word "kite" embedded somewhere within the beacon message.

Wildcard Beacons will be hidden somewhere within the cw portions of the 80, 40 and 30 meter amateur bands. Operating times and frequencies of these beacons will be kept secret and won't appear in the beacon schedule. They will be identified with the call W3RDF/qrp. There will be only a few hours of wildcard beacon operation during this expedition.

All beacons will be operated from battery power. Ground based beacons will be operated directly from solar panels (during daylight hours) or from solar charged batteries.

BEACON SCHEDULE

Date: 27 March, 1998

1900Z - 2400Z Frequency 7029 kHz, ground
1900Z - 2400Z Frequency 10124 kHz, ground
2100Z - 2300Z Frequency 14059 kHz, kite

Date: 28 March, 1998

0000Z - 0300Z Haystack 7000 kHz to 7040 kHz, ground
0000Z - 0200Z Frequency 10118 kHz, kite
0300Z - 1200Z Haystack 3501 kHz to 3600 kHz, ground
0300Z - 1200Z Haystack 10100 kHz to 10150 kHz, ground
1300Z - 2100Z Haystack 7100 kHz to 7130 kHz, ground
1300Z - 2100Z Haystack 10100 kHz to 10130 kHz, ground
1330Z - 1630Z Frequency 21063 kHz, kite
1330Z - 1630Z Frequency 7040 kHz, kite
1730Z - 2100Z Frequency 28023 kHz, kite
1730Z - 2100Z Frequency 14059 kHz, kite
2130Z - 2400Z Frequency 7112 kHz, ground
2200Z - 2400Z Frequency 21062 kHz, kite
2200Z - 2400Z Frequency 10119 kHz, kite

Date: 29 March, 1998

0000Z - 0200Z Frequency 21062 kHz, kite
0000Z - 0200Z Frequency 10119 kHz, kite
0000Z - 1200Z Haystack 7000 kHz to 7030 kHz, ground
0000Z - 0400Z Haystack 14045 kHz to 14065 kHz, ground
0400Z - 1200Z Haystack 3501 kHz to 3750 kHz, ground
1300Z - 1500Z Frequency 28023 kHz, kite

QSL INSTRUCTIONS FOR BEACONS

We are asking all stations to submit reception reports either directly to
AA4XX (Paul Stroud, 1318 Alderman Circle, Raleigh, NC 27603) or via the
internet to AA4XX@amsat.org. Please provide the following information:

Date:
Time: (in UTC)
Frequency:
Beacon message:
Beacon RST:
Your Receiver:
Your Antenna:
Your Comments:

Due to the substantial number of beacons that will be running throughout
the
weekend, we will not be issuing QSL cards for the individual beacons;
rather,
our confirmation will be in the form of a certificate.

Certificates will be available for finding, copying and QSL'ing our

beacons.

Special recognition will be given for finding 5 of our beacons and

Honorable

recognition will be given to those finding more than 5. The Beacon

Search

Master title will be awarded to those finding more than 5 of our beacons
in

addition to finding at least one wildcard beacon. QSL instructions can
be

found within the beacon message.

CERTIFICATE INSTRUCTIONS

Those stations who would like to receive this unique Core Banks Beacon
Certificate are requested to send \$2.00 (\$3.00 for DX stations) directly
to AA4XX at the mailing address listed above under "QSL Instructions".

These funds will enable us to cover the costs of printing and mailing
the

certificates. Be sure to include the following information:

Name: (As you want it to appear on your certificate)

Street:

City:

State:

Zip Code:

Your Callsign:

INCLUDE THE FOLLOWING INFO FOR EACH BEACON COPIED:

Date:

Time: (in UTC)

Frequency:

Beacon message:

Beacon RST:

Your Receiver:

Your Antenna:

Your Comments:

For full information on the KnightLites Expedition to Core Banks, please
refer to

the following URL: <http://www.ipass.net/~aa4xx/core.htm>

Date: Tue, 17 Mar 1998 18:59:50 -0800

From: Russ Carpenter <russ@natworld.com>

To: "QRP-L List" <qrp-l@Lehigh.EDU>

Subject: [6238] To Bee or Not to Bee
Message-ID: <199803180300.TAA28392@guppy.pond.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
Content-transfer-encoding: quoted-printable

A week ago we sent an invitation to the members of Adventure Radio Society to serve as Bumblebees in the upcoming Flight of the Bumblebees (to be held on July 26). What a response! We now have 75 Bees raring to go.

We'd now like to extend the invitation to the esteemed members of QRP-L. If you'd like to experience Beedom this summer, please send an email to Russ Carpenter, AA7QU, at russ@natworld.com. If we get a mess of replies, we're planning to cap the group at 100.

Bumblebees operate from outdoor sites they've reached by human power. That is, they've gotten there by skiing, snowshoeing, walking, biking, rowing or paddling. Bees are an a highly respected lot and are eagerly chased during the Flight of the Bumblebees.

Here are the full rules.

The Flight of the Bumblebees

This is a four hour event during the last Sunday of July, running from 10:00 PDT/11:00 MDT/12:00 CDT/1:00 EDT to 2:00 PDT/3:00 MDT/4:00 CDT/5:00 EDT. In March of each year, ARS appoints 50 Bumblebees from all over the country. The Bumblebees agree to reach their sites by human power=8Bwe define "human power" as skiing, snowshoeing, walking, biking, rowing or paddling. The distance traveled to the site is at the Bumblebee's discretion. Bumblebees add "/BB" to their calls.

The hours of operation accommodate all four time zones. No matter where you live, there is time to for the Bumblebees to travel to their sites, set up their stations, operate the contest, and travel back to their cars. The Bumblebees are chased by home-based operators and each other. Maximum power is five watts. We operate CW on 40, 20, 15 and 10 meters, on the standard QRP frequencies. We want this to be a national contest, so we encourage long-range contacts by giving double points for 20, 15 and 10 meters. 40 meter contacts receive one point. The same station can be worked on different bands for additional QSO points and multipliers. The exchange is RST, state/province/country, and your first name.

Contacts with Bumblebees generate a 3X multiplier. So your score equals QSO points times (number of Bumblebees times three). Here is an example.

If you make 20 contacts on 40 meters and 30 contacts on the higher bands, and make a total of 25 Bumblebee contacts, your score is $(20+60) \times (25 \times 3)$, or 6,000. Separate but equal prizes are awarded to the home-based and Bumblebee winners.

Participants are strongly encouraged to use our automated contest reporting system, which is found in the ARS Web Site at <http://www.natworld.com/ars..> Participants may submit paper logs, with a two week deadline. Results are posted during the third week of August in the ARS Web Site, the QRP-L Internet Group, and by direct email to ARS members. For those who send us SASEs, we mail a paper copy of the results.

If you choose to use a paper log, please include at least the following:

- =80 Your full name and callsign;
- =80 Your status (Bumblebee, or home-based).
- =80 Date of the event;
- =80 Total number of completed QSOs with Bumblebees, and
- =80 Total number of completed QSOs with all other stations.

You may also want to add soapbox information, such as the equipment used, your operating location, interesting contacts, successes and challenges.

You don't need to be a member of ARS to participate in the Flight of the Bumblebees, but we would welcome your interest in becoming a member. Inquiries may be directed to ARS' membership chairman. His name and address are Richard Fisher, nu6SN, 1940 Wetherly Street, Riverside, CA 92506 (e-mail nu6SN@aol.com).

Russ Carpenter, AA7QU, is the Contest Manager. Mail paper logs to him at 47227 Goodpasture Road, Vida, OR 97488. You can reach Russ by mail, by phone at (541) 896-0263, by fax at (541) 896-0310 or by email at russ@natworld.com

Date: Tue, 17 Mar 1998 13:09:27 -0800
From: Ken Lopez <kjlopez@earthlink.net>
To: tahrens@inetport.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [6239] Re: IC706MK II Observations (long)
Message-ID: <350F3D02.2C72@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Tim Ahrens wrote:

- > 1. The Carrier Freq Adjust (Q4) - in receive, doesn't seem to
- > do anything. The Icom guy said it's used to make your voice
- > sound more natural to the other guy in the transmit mode..???
- > Any comments on how this should work? The manual doesn't seem
- > to talk about it. Nothing from -200 to +200 hz did anything.

The Icom guy is correct. It works in transmit only, by changing the carrier oscillator frequency to change your voice characteristics. You will hear a bass emphasis, or a lack of bass depending on which way you change it. Listen on another receiver to adjust this, or have a friend help you on the air.

- >
- > 2. The sub-audible tone seems to be fixed a bit high.. I've had
- > a couple of reports of hum in my 2 meter audio. The Icom guy
- > said that it's a fixed resistor, and not adjustable.

Also correct. It is sometimes audible depending on the tone used, and the speaker used to listen to it. This is common, and happens in other rigs as well.

- >
- > 3. With the IF shift knob centered in it's detent, I've noticed
- > that high signal stations also show some significant opposite
- > sideband signals. e.g. a S9+20 signal on one side of the carrier
- > has about an S7 signal on the opposite. If I rotate the IF shift
- > knob a bit, I can't hear the opposite sideband at all. The
- > Icom guy said this is normal. hmmmmm

Hmmmmmm indeed! This sounds like an alignment problem.

- >
- > 4. The sub audible tone is not very well filtered in the receive
- > audio chain. It was quite noticeable. This was with a TS-940
- > external speaker.. perhaps a smaller speaker wouldn't respond
- > so well to the low frequencies.
- > The guy at Icom said this was normal.

Also correct. The only way to lessen this would be to limit the audio bandwidth on the low frequency end. It will show up on a speaker with relatively good low frequency response such as the SP-940.

- >
- > 5. By holding the MODE button down (in CW mode), it switches
- > to listening to the opposite sideband. I've noticed that it
- > does do this, but it's not exactly the same frequency that you
- > were listening to.

You will hear a different noise component by listening to the opposite sideband. This is also normal due to the changes in the extraneous noises and signals you hear at different points in the band. Try

listening to this in a quiet segment out of band. If the noise is extremely different when you reverse sidebands, then there may be an alignment problem here, perhaps related to the one noted above.

>

> 6. The 40 meter night stuff... He said it's 'normal'. I used the
> MFJ 949 as a preselector/tuner to the triangular array, and the
> garbage went away. BTW, I didn't see very much of the garbage
> when I was hooked up to the 135' dipole.

I'm not sure what you mean here. Make sure the preamp is turned off to maximise your headroom and intercept point.

I hope this helps. My comments are based on my experience with a 706 MkI, but they seem to have nailed even the few nits I could have picked when they reworked it. It is quite a neat little rig.

Cheers,
Ken, N6TZV

Date: Tue, 17 Mar 1998 19:29:03 -0800
From: "Bob White" <bobwhite@accesscom.com>
To: <qrp-l@Lehigh.EDU>
Cc: <adams@sgi.com>
Subject: [6240] Fox Results W03B
Message-ID: <000701bd521e\$05645580\$489ee2cd@get.accesscom.com>
MIME-Version: 1.0
Content-Type: multipart/alternative;
 boundary="-----=_NextPart_000_0004_01BD51DA.F1FC3500"

This is a multi-part message in MIME format.

-----=_NextPart_000_0004_01BD51DA.F1FC3500
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

And the winner is=85..=85=85=85..

9 TX=20

8 AZ=20

4 CA=20

3 OK

2 ID, MI, MN, NC, NM, NY, WI, SK

1 AR, CO, CT, FL, IL, IN, MO, MT, NV, OR, SD, VA, WA, BC

The players=85=85=85

0400 K1MG MIKE CA 614

0401 AB7TK RANDY ID 102

0402 AB7TT JOE AZ 191

0403 AB5UA CLIFF OK 478

0404 NQ7X FLOYD AZ 343

0405 N5LU BILL OK 5W

0406 W0RW PAUL CO 3W

0407 VE5RC BRUCE SK 886

0409 K10J OJ TX 732

0411 W6EMT ROY WA 369

0413 K0EVZ DOC MN 861

0414 W5FN TIM TX 586

0415 W8RU RON MI 188

0417 N6WG BOB CA 26

0418 AA5TA LARRY TX 1245

0419 W5HNS HARRY TX 178

0421 K5ID KEN AR 652

0422 K5ZTY BILL TX 473

0423 KK6MC/5 JIM NM 411

0424 AB7MY GARY AZ 571

0428 VE7CQK PAUL BC 20
0430 AA0ZZ CRAIG MN 1238
0431 N7KT ROGER AZ 62
0433 VE5WF EARL SK 1076
0435 K5ON GARY NM 770
0436 KI7MN BOB AZ 271
0437 N7XJW AL AZ 1259
0439 WA9PWP PAUL WI 127
0440 AB7OA KENT AZ 57
0441 N4RD ????? NC 4W
0442 W0CH DAVE MO 618
0444 W1HUE LARRY ID 228
0446 WD4MSM BARRY IN 642
0448 KF6NEB ANDY CA 5W
0452 N7IR GARY AZ 1330
0454 WA6NAE DWIGHT CA 2W
0457 KQ5U RAY TX 5W
0459 KA5T RAY TX 89
0502 K5JHP BILL TX 825
0504 K2VNM BOB NY 735
0506 K5UP GLEN OK 21
0507 KU7Y RON NV 17 3W
0509 N4ROA DAN VA 970
0512 N1TP TOM FL 1317

0515 K8CV WALT MI 935

0518 N7CQR DAN OR 502

0520 W0RSP ADE SD 4W

0522 AE4MX HENRY NC 135

0527 KF2PH NICK NY 13

0536 KB9IUA KEVIN IL 384

0543 KC1FB JIM CT 29

0549 AB7CE ROY MT 1494

0557 KD5CMN MIKE TX 1328

0558 WB9LKC RAY WI 8

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Not bad for only four hours work! Add in the 8 hours I worked the ARRL =
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to say that my MD 571 foot loop was overkill for QRP WAS. It looks like =
I am well on the way to repeating the feat with only a small hunk of =
aluminum located in just a little bitty back yard.

--QRPp=97

Bob W03B

-----_NextPart_000_0004_01BD51DA.F1FC3500

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charset="iso-8859-1"

Content-Transfer-Encoding: quoted-printable

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</HEAD>

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<P>And the winner is…..………..</P>

<P>9 TX </P>

<P>8 AZ </P>

<P>4 CA </P>

<P>3 OK</P>

<P>2 ID, MI, MN, NC, NM, NY, WI, SK</P>

<P>1 AR, CO, CT, FL, IL, IN, MO, MT, NV, OR, SD, VA, WA, BC</P>

<P>The players………</P>

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<P>0406 W0RW PAUL CO 3W</P>

<P>0407 VE5RC BRUCE SK 886</P>

<P>0409 K10J OJ TX 732</P>

<P>0411 W6EMT ROY WA 369</P>

<P>0413 K0EVZ DOC MN 861</P>

<P>0414 W5FN TIM TX 586</P>

<P>0415 W8RU RON MI 188</P>

<P>0417 N6WG BOB CA 26</P>

<P>0418 AA5TA LARRY TX 1245</P>

<P>0419 W5HNS HARRY TX 178</P>

<P>0421 K5ID KEN AR 652</P>

<P>0422 K5ZTY BILL TX 473</P>

<P>0423 KK6MC/5 JIM NM 411</P>

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<P>0436 KI7MN BOB AZ 271</P>

<P>0437 N7XJW AL AZ 1259</P>

<P>0439 WA9PWP PAUL WI 127</P>

<P>0440 AB7OA KENT AZ 57</P>
 <P>0441 N4RD ????? NC 4W</P>
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 <P>0518 N7CQR DAN OR 502</P>
 <P>0520 W0RSP ADE SD 4W</P>
 <P>0522 AE4MX HENRY NC 135</P>
 <P>0527 KF2PH NICK NY 13</P>
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bitty back yard.</P>
<P>--QRPP—</P>
<P>Bob W03B</P>
<P> </P></DIV></BODY></HTML>

-----=_NextPart_000_0004_01BD51DA.F1FC3500--

Date: Tue, 17 Mar 1998 22:40:11 -0500
From: "Jim Francoeur KC1FB" <jim_kc1fb@pipeline.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [6241] Oh no! My chirp is back & the fox evaporated!
Message-ID: <199803180340.WAA29507@camel7.mindspring.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

I heard Jim off and on as he moved up in frequency. Finally thought I caught him without too many hunters up at 7.043. I got his info and my signal report without the "normal" 9 at the end. Chasing him up had detuned my antenna match so that my ARG0 509 was chirping again. I answered with my info and.....nadda.....QRM or QSB, but I couldn't hear Jim at all. Listened hard for a few minutes, but nothing. Don't know if he copied all my report.

I have to figure out what's causing the ARG0 to chirp when it's not matched just right. Anyone in this great list got any ideas?

Jim Francoeur KC1FB/qrp QRP-L #29

Date: Tue, 17 Mar 1998 20:36:43 -0800
From: Frank <frank001@postoffice.worldnet.att.net>
To: qrp-l@Lehigh.EDU
Subject: [6242] HW-8 article
Message-ID: <350F4F5B.2B75@postoffice.worldnet.att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I want to bring my HW-8 out of mothballs. Seems I remember reading a series of articles in one of the Ham mags some years ago (80's ?) about making the HW-8 a 'Super Contest Machine'.

Anybody know where/when these articles were published? Even better, can anyone supply copies of the articles? I'll be glad to pay copying and postage.

Thx es 72 Frank W6EV

Date: Tue, 17 Mar 1998 22:50:34 -0600
From: Tim Ahrens <tahrens@inetport.com>
To: kjlopez@earthlink.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [6243] Re: IC706MK II Observations (long)
Message-ID: <350F529A.5E4B64C0@inetport.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Ken - thanks for the great response! Just what I was hoping for.

On the carrier adjust, I played with it by listening to the output of the 940, but you really can't adjust something like that by listening to yourself! I'll get someone to help me on the air.

On the IF shift - I'm planning to get the service manual, so I'll check some of the oscillator frequencies. It may just be that one of them is off freq a tad.

On the received sub audible tone, with the internal speaker, you almost can't hear it. I guess the external speaker I'm using is too good!! :-)

On the 40 meter night stuff, it is with the preamp off. I hear all kinds of hetrodynes, & junk.. it goes away when I put the attenuator in (or run it through the tuner). Not a big deal.

You are right, it's really a nifty rig.

Thanks again for your comments!

Tim W5FN

Date: Tue, 17 Mar 1998 21:06:44 -0800
From: Bill Todd <bill@willapabay.org>

To: AC6JA@aol.com
Cc: qrp-1@Lehigh.EDU
Subject: [6244] SG-2020 Delivery Schedule Delayed, AGAIN!!!
Message-ID: <1.5.4.32.19980318050644.0071cf20@willapabay.org>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

AC6JA wrote:

>after calling them today on the phone, they are now stating that all past
>orders will start shipping within 60 DAYS, MAYBE! since this is at least
the >fourth extension they have announced, i wouldn't hold my breath and
>anticipate anytime before may or june!

I understand your frustration on this. I have not ordered the SGC2020
mysenf, and have no connection with the company whatever.

However, consider this: What would happen if SGC rushed out a bunch of
radios that were NOT perfect, in an attempt to fulfill the orders that are
presently on hand?

Answer: with the speed of the Internet (and the QRP-L), all the negative
reports on the SGC rig would destroy any future efforts by SGC in the
amateur market. It's that simple.

So, I can blame SGC for promising delivery dates that were NOT realistic,
but if I were in THEIR shoes, I would be very careful NOT to send out
hundreds of radios that were not perfect in every detail.

I feel bad for every QRPer that has been waiting and waiting for what
promises to be a very nice piece of gear...but if I were waiting too, I
would want my wait to be worth something.

CUL, Bill-N7MFB
<http://www.willapabay.com/~bill>
ICQ me at #8926298

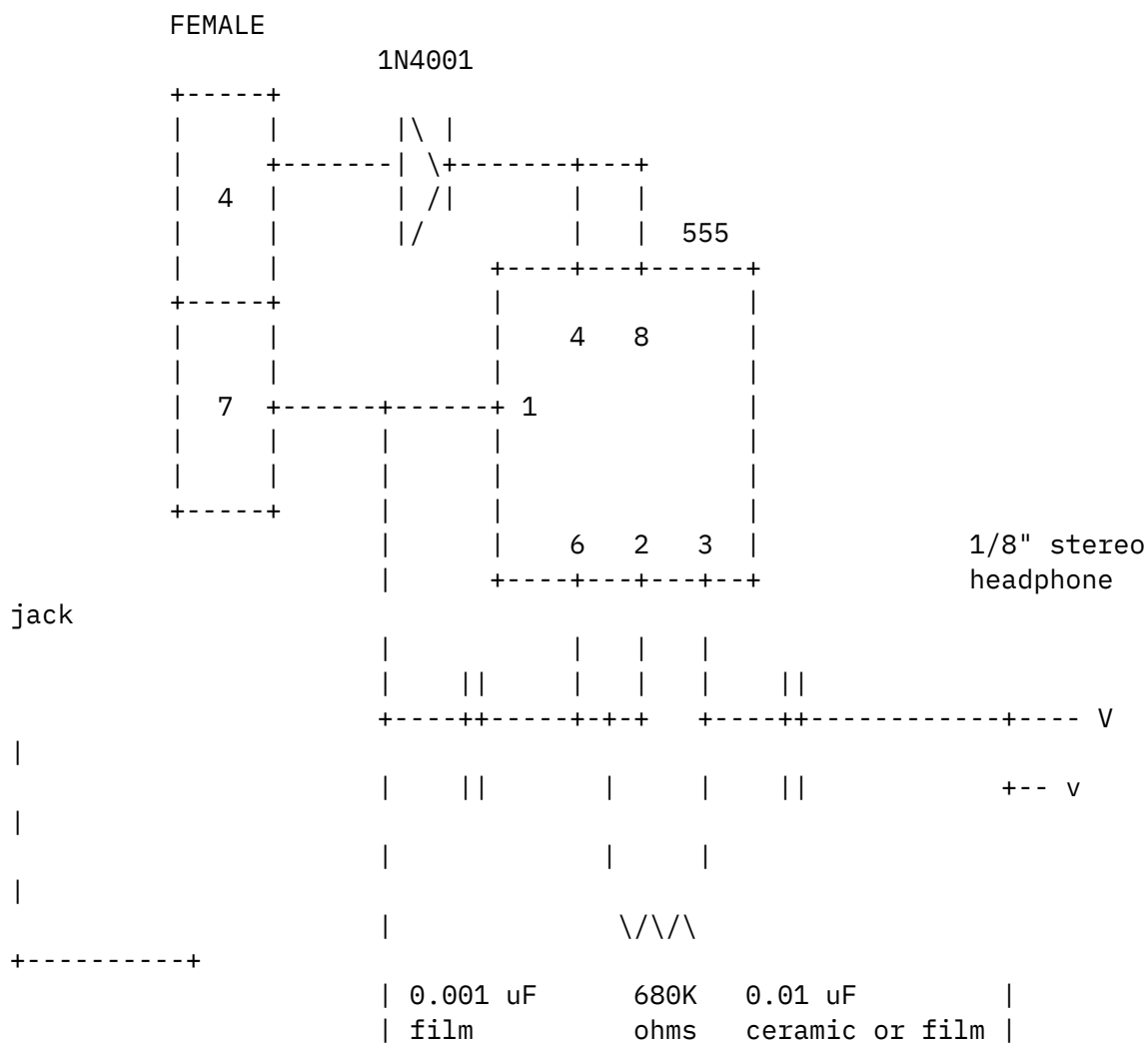
Date: Tue, 17 Mar 1998 21:24:08 -0800
From: Chuck and Michele Snyder <csnyder@nextdim.com>
To: QRP <qrp-1@Lehigh.EDU>
Subject: [6245] re: Update on No Sound in PC (Super Morse) NEED YOUR HELP!
Message-ID: <350F5A77.BE5B1039@nextdim.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Hi All,

Okay, I found out that the PC speaker is dead, and I believe the speaker is okay because I used jumpers to connect a new speaker and it didn't work either while booting up the computer. I also went into the readme file of Super Morse and found several interesting schematics. Following is one of them. Can anybody out there explain to me what DB-25 is? I think it is the 25-PIN data bus, and (4) & (7) is--PIN 4 & PIN 7. Am I correct? If you open this schematic in Windows Notepad, it will look alot better. I opened it in Windows95 Word 7, and it looked like a jig-saw puzzle with a couple of pieces gone. Anyway, I would appreciate your input.

DB-25



| |
+-----+

This easily fits inside the DB-25 shell.
Adjust the 680k ohm resistor to change the

pitch--

higher value for lower pitch, etc.
Decrease the value of the 0.01 uF cap. for lower
volume.

Super Morse Options|Ports settings:

Keying Port : <your choice from what's
available>

Output Keying: ON
RS-232 Output: RTS
Output Sense : -

--

Chuck Snyder (No_Call_Sign_Yet)
<http://www.nextdim.com/users/csnyder/index.htm>
QRP-L #1462
Spokane, WA

Date: Tue, 17 Mar 1998 22:21:12 -0700 (MST)
From: Paul Harden <pharden@aoc.nrao.edu>
To: Frank <frank001@postoffice.worldnet.att.net>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [6246] Re: HW-8 article
Message-ID: <Pine.SOL.3.91.980317221427.18943A-100000@zia>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Frank and others,
The definitive article on the HW-9 (anyway) is by Gary Surrency,
AB7MY. It was printed in the Winter 1997 QRPp (NorCal QRP Club)
and now available as part of the 1997 QRPp annual bound volumes.
Contact ki6ds@dpol.k12.ca.us if you're interested in obtaining the
reprints.

Also, part I of Gary's article was published in the last QRP Quarterly (ARCI) and presumably part II will appear in the next issue, which will be out shortly. I don't know the status of obtaining ARCI reprints, but contact Danny Gingell, K3TKS for reprint information at k3tks@abs.net

Some of the information applies to both HW-8's and 9's, but I'm not qualified to make the distinction.

GL, Paul NA5N

Date: Tue, 17 Mar 1998 23:00:22 -0600
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: qrp-l@Lehigh.EDU, cqc@mtechnologies.com
Subject: [6247] Milestone now has Nye keys
Message-ID: <199803180559.WAA14054@edison.chisp.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

Milestone Technologies has just received the first shipment of Nye keys and paddles-- the following are now in stock:

312-001 Oval-base Speed-X Key with brass hardware \$32.95
This is one of the classic Speed-X keys, with a crinkle-finish black oval base and elegant brass hardware. The contacts are gold-plated heavy silver and the key action is fully adjustable.

SSK-001 Super Squeeze Key \$69.95
It's great in the shack, but could this be the prefect mobile paddle? I've been using one for years and it's the only one I'll drive while driving. With its heavy cover, the SSK is rugged enough to tuck under the bungee cord holding the rig, and it can be set up so that you can keep sending even on a rough old mountain road. It almost never needs adjustment, and the 24K Gold plated contacts are virtually imune to dust and completely imune to corrosion. The large, smooth finger-pieces are easy to find in the dark, too!

Standard shipping applies (\$5 per order for Priority Mail).

Images are on the web site at <http://www.mtechnologies.com/nye.htm> and you can use our secure credit card ordering facilities, or call 800-238-8205 to order by phone.

Thanks for the bandwidth. Tomorrow I hope to be able to announce some new tools, and a new "web ring" just for ham radio and electronics vendors. After that I promise to shut up for a while.

73

Marshall Emm
N1FN/VK5FN
n1fn@mtechnologies.com
Milestone Technologies
Software, kits, tools...
<http://www.mtechnologies.com>
(303)752-3382
--

Date: Tue, 17 Mar 1998 22:15:54 -0800
From: Chuck and Michele Snyder <csnyder@nextdim.com>
To: QRP <qrp-l@Lehigh.EDU>
Subject: [6248] DB-25 Connector and Pinouts
Message-ID: <350F6699.C025E3DC@nextdim.com>
MIME-Version: 1.0
Content-Type: multipart/mixed; boundary="-----06A8BC281741266C994B7A2C"

This is a multi-part message in MIME format.

-----06A8BC281741266C994B7A2C
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Gang,

I found this nice PIN out of a 25 pin connector with a nice photo too!

<http://www.mindspring.com/~jc1/serial/Basics/DB25.html>

--

Chuck Snyder (No_Call_Sign_Yet)
<http://www.nextdim.com/users/csnyder/index.htm>
QRP-L #1462
Spokane, WA

-----06A8BC281741266C994B7A2C
Content-Type: text/html; charset=us-ascii; name="DB25.html"
Content-Transfer-Encoding: 7bit

Content-Disposition: inline; filename="DB25.html"
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Basics/DB25.html"

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ALT="Backward" BORDER=0>

<IMG SRC="../../Arrows/Forward.gif" WIDTH=22 HEIGHT=22
ALT="Forward" BORDER=0>

<IMG SRC="../../Arrows/Homepage.gif" WIDTH=22 HEIGHT=22
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<H2>DB-25 Connector and Pinouts</H2>

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This is the "standard" RS-232 connector, with enough pins to cover all the signals
specified in the standard. The table shows only the "core" set of pins that are
used for most RS-232 interfaces.<P>

(Coming someday: a link to the complete list of signals.)<P>

The images show the male and female versions of the DB-25 connector with pin
numbers.<P>

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<TH>Signal</TH>
<TH>Pin</TH>
<TH>DTE</TH>
<TH>DCE</TH>
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<TD ALIGN=CENTER>2</TD>
<TD ALIGN=CENTER>0</TD>
<TD ALIGN=CENTER>I</TD>
</TR>

<TR>
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<TD ALIGN=CENTER>I</TD>
<TD ALIGN=CENTER>0</TD>
</TR>

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<TD ROWSPAN=5>Handshake</TD>
<TD ALIGN=CENTER>RTS</TD>
<TD ALIGN=CENTER>4</TD>
<TD ALIGN=CENTER>0</TD>
<TD ALIGN=CENTER>I</TD>
</TR>

<TR>
<TD ALIGN=CENTER>CTS</TD>
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</TR>

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<!--end outer table-->
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ALIGN=CENTER>
<IMG SRC="DB25/DB25femaleT.gif" WIDTH=343 HEIGHT=108 ALT="DB-25 Female"><P>
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ALT="Homepage" BORDER=0></A>
<!------->

<HR>
<!------->

<EM>Last modified 1997 Aug 16 by <A HREF=MAILTO:jc1@mindspring.com>JC</A></EM>

</BODY>

</HTML>
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-----06A8BC281741266C994B7A2C--

Date: Wed, 18 Mar 1998 01:39:16 -0500
From: "duane" <duane@flinet.com>
To: "qrp-l group" <QRP-L@Lehigh.EDU>
Subject: [6249] website update
Message-ID: <01bd5238\$927c2e60\$06180ed0@ab4be.earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Thought I'd let you all know I've update my web page recently
please check it out. <http://www.flinet.com/~duane/ham/ham.html>

72's

Date: Tue, 17 Mar 1998 23:44:43 -0700 (MST)
From: Paul Harden <na5n@rt66.com>
To: qrp-l@Lehigh.EDU

Subject: [6250] New 38-S: the 44-MAGNUM
Message-ID: <Pine.SUN.3.96.980317234029.29126D-1000000@mack.rt66.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

The 44-MAGNUM 30M QRP kit -- the upgraded 38-Special
(To be available summertime, 1998 - see below)

For those new to QRP-L, the 38-SPECIAL was last years NorCal club kit. It was a simple 30M transceiver with superhet receiver for \$25. Circuit simplification was due to using 4066 CMOS switches to change the function of an NE602 from the product detector (rcv) to the transmit mixer. The 38-S was designed by Ori Mizrahi-Shalom, AC6AN.

The kit is no longer available. In spite of selling 2000 kits, NorCal continues to receive requests for the kit from entry-level builders and those new to QRP. It was decided to continue its availability. It is being redesigned by Bob Berlyn, N1PWU, with assistance from Ori AC6AN and Paul NA5N, under an agreement with the NorCal QRP Club.

Slated release of the kit will be shortly after Dayton (summer, 1998) and will be available from:

HB ELECTRONICS
43 Rector Street
East Greenwich, RI 02818

It will be offered in the \$45-50 price range, although Bob Berlyn is trying hard to get the cost down to \$44, only natural for the "44" MAGNUM name in spite of the extra features included in the stock kit ... such as an IRF510 power MOSFET 5W output, TiCK keyer, expanded IF filtering, and control for RIT or DRIVE (user selectable). It will be board kit with all controls provided.

Some specific features of the 44-M (and changes from the 38-S) are:

- * INPUT TRANSFORMER T1 (toroidal) and variable cap TC1 has been replaced with a 10.7MHz IF transformer, shunted down to 10.1 MHz for easier front-end alignment (one true peak).
- * TUNING is a pot, furnished for on-board mounting, to control the VXC0.
- * RECEIVE MIXER is a NE602 with RF GAIN control (pot provided and mounted on-board) for manual volume control or strong signal attenuation.
- * CRYSTAL FILTER is now two-pole for -26dB USB rejection, with mounting holes for adding up to a 4-pole crystal filter and associated caps.
- * MORE RECEIVER GAIN is achieved by adding a 2N3904 amplifier after the product detector for 6dB more audio gain in receive; same amplifier serves as the first xmit driver in transmit.

- * VARIABLE BFO has been added (trim cap for C21) to set the CW tone to your liking and to match center-frequency of the audio filter.
- * CW FILTER is a 2-pole 150Hz BW bandpass active filter using a TL082.
- * VOLTAGE REGULATOR is a zener/series regulator transistor scheme instead of 7808 for better RF immunity at 5W (prevents thump and shot noise on receive).
- * TiCK KEYER from Embedded Research furnished and provided on-board.
- * SIDE TONE from on-board oscillator, set at 700Hz.
- * XMIT DRIVER HC240 has been removed and replaced with tuned RF amplifiers.
- * IRF-510 power MOSFET for 4-5 watts output is stock.
- * TRANSMITTER keyed with a delayed T-R switch to prevent thump.
- * The 3rd front panel pot, furnished and board mounted, can be used either for (builder's discretion):
 - > DRIVE control for variable output power (~100mW to 5 watts)
 - > Optional RIT control
- * Printed circuit board is a single sided board with top ground plane, plated through holes and screened for component locations. Size is about the same size as original 38-S, about 4x4 inches.

Optional circuitry provided for (builder furnishes parts):

- * Expanding the IF filter to 4-poles (4 crystals)
- * Receiver Incremental Tuning (RIT)
- * An auto-switching S-meter (rcv)/output power meter (xmt) circuit
- * Metering circuit, from TUNE control, to show operating frequency
- * Connection details for adding the K1MG DCC for digital freq. readout

These changes to the 38-S, and full 44-M schematic, will be made public when finalized, as some of these improvements can be added to existing 38-Specials for those so interested. Details and photos are forthcoming to the HB Electronics homepage.

STATUS REPORT. Bob and I are both building prototypes and the receiver and control circuitry is pretty well finalized. The receiver improvements works well with a -125dBm MDS, 150Hz BW CW filtering, noticeably louder audio and good opposite sideband rejection (no confusion as to what side band you're on). The adjustable "IF Can" and BFO makes alignment easy (one peak), setting the CW tone to your liking, and allowing the product detector to be peaked to the IF for maximum conversion gain.

The transmitter portion is being wrapped up now and added to the prototype board. Circuit board layout is complete, pending final changes, so we can get some prototype builders to build the kit around the end of April, with the first batch of kits available shortly after that.

Due to being one of the prototype testers of the original 38-S, I was asked to give a hand with the 44-M development and testing, which I agreed to do (way back at PacifiCon), as I enjoy doing for other projects. I do not own stock in HB Electronics. Now you know why I didn't do much

FOX hunting this year -hi. The 38-S was a great little kit for \$25 and serves as a great platform for a nice, simple, efficient rig, and I shared with the belief that such a platform should be continued, and with some additional circuitry, make it even better. Following it's release by HB Electronics, 15M and 20M versions are being contemplated.

There are many great QRP kits out there, and several new ones in the works right now. They all are fun to build, fully functional for making QSO's and all have their own merits. The point of this post and those from the others is to read the information and decide for yourself which kit "turns you on." And for those who missed out on the 38-S offering, or wish for an upgraded version, this preliminary announcement serves to let you know it will be living on.

72, Paul NA5N

Date: Tue, 17 Mar 1998 23:51:28 -0700 (MST)
From: Paul Harden <na5n@rt66.com>
To: qrp-1@Lehigh.EDU
Subject: [6251] Oscope - read first
Message-ID: <Pine.SUN.3.96.980317234510.29126E-100000@mack.rt66.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Evidently, a bunch of the Elmer 101 guys are getting scopes and asking me about how to use them. Therefore, I'm reposting this for general interest.

OSCILLOSCOPES - BASIC USE AND MEASUREMENTS
by Paul Harden, NA5N

INTRODUCTION

To follow are the text versions of an article I wrote for the Summer 1997 issue of NorCal's "QRPP," entitled "Oscilloscopes (Part 1)". The article contains numerous illustrations and photos of oscilloscope displays, which unfortunately can not be included in this text file. "Oscilloscopes (Part 2)" will appear in the Winter 1997 "QRPP," and I'll make it a continuation of this text file series at that time.

THE QRP-L TEXT FILES ... have been broken down into 4 text files for posting to QRP-L and to make the files a bit more manageable by keeping them less than 10K each, which contain:

O-SCOPES PART 1: Basic oscscope description, calibration and controls
O-SCOPES PART 2: Measurements: DC and AC voltages; time and frequency
O-SCOPES PART 3: Measurements: Amplifier gain and Insertion Loss
O-SCOPES PART 4: Measurements: Phase shifts and delays

There are real-world QRP examples following each measurement topic, of which most can be done with a limited bandwidth scope. The text has been altered slightly from the original article to compensate for the lack of illustrations. Hopefully you'll find these informative and useful in learning how to better use your oscilloscope.

Part II of the scope article appeared in the Winter 1997 QRPP and both parts available in the 1997 bound annual volume. I will try to get Part II loaded as an ascii file to post to QRP-L as well, hopefully before the asteroid hits!

72, Paul Harden, NA5N
NA5N@Rt66.com

Date: Tue, 17 Mar 1998 23:52:58 -0700 (MST)
From: Paul Harden <na5n@rt66.com>
To: qrp-l@Lehigh.EDU
Subject: [6252] Oscopes-1
Message-ID: <Pine.SUN.3.96.980317235153.29126F-100000@mack.rt66.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

OSCILLOSCOPES - BASIC USE AND MEASUREMENTS
by Paul Harden, NA5N

PART 1 - BASIC DESCRIPTION, CALIBRATION AND CONTROLS

NOTE: This is a text version of an article appearing in the Summer 1997 issue of "QRPP." The article contains numerous illustrations and

photos of oscilloscopes displays, which unfortunately can not be included in a text file.

GENERAL O-SCOPE DESCRIPTION.

THE VERTICAL INPUT is applied to the vertical input amplifier, which is quite sensitive, designed for a 25-50mV input. For larger inputs, the signal is routed through attenuators comprised of simple voltage dividers. These attenuator dividers is what forms the VERTICAL SENSITIVITY, calibrated in mV/division or V/div. An INPUT COUPLING switch selects DC or AC coupling, and sometimes a GROUND position. The output of the vertical input amplifiers is a differential signal, amplified up to high voltages and applied to the CRT (cathode ray tube) vertical plates for deflecting the beam in the vertical axis.

THE HORIZONTAL AMPLIFIERS are driven by an internal sweep generator, amplified to a high voltage and applied to the CRT horizontal plates for deflecting the beam in the horizontal axis ... that is, the sweep that moves the beam from left-to-right.

Thus, for a proper oscilloscope display, such as displaying a sinewave, it is a combination of moving the trace from left to right to show TIME, and up-and-down to show MAGNITUDE.

THE SWEEP GENERATOR is a constant current source charging a capacitor to make a linear sawtooth waveform. The value of the capacitor will determine the time it takes to eventually move the beam across the screen, and is selected by the HORIZONTAL SWEEP control, calibrated in seconds, mS, uS (or nS) per division. The faster the beam moves across the screen, the higher the frequency that can be displayed. An important task of a scope is to display a stable waveform, which is done by starting the sawtooth sweep at exactly the same time in respect to the input signal. A switch labeled TRIGGER SOURCE determines what initiates the sweep. In the INTERNAL position, a sample of the input signal from the vertical amplifiers is used, and when it reaches a certain level, WOOSH, the sweep occurs. In the AUTO mode, the sweep is free running and not necessarily synchronized with the input signal. In LINE position, the sweep is triggered off of 60-Hz from the power supply (useful for synchronizing to TV/VCR signals), and EXTERNAL the sweep is triggered from an external input applied to a BNC (on the front or the back of the scope).

OTHER FEATURES your scope may have are:

- * Two vertical input channels for dual-trace operation
- * Two separate time bases for delayed sweep operation
- * Various modes to display the input signals (alternate, chopped, A+B added, invert B, A intensified by B, etc.)
- * Built in calibrators

CALIBRATING YOUR SCOPE.

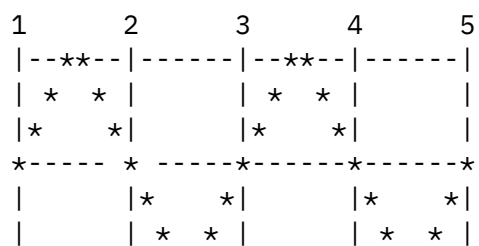
Likely, you obtained your scope from a hamfest, the company junk bin, etc. The first thing you should do upon acquiring a scope is to check its calibration.

THE VERTICAL AMPLIFIERS can be checked with a known voltage source, such as a 9v battery. Measure the battery output with an accurate voltmeter. Let's say it's exactly 9v. Set the input coupling to the GND position (0v) and move the trace to the bottom division. Switch the input coupling to DC and set the attenuators to 2v or 5v/div. to give a nearly full scale deflection. For example, if your scope has four vertical divisions, setting the attenuators to 2v/div. would be 8V full scale deflection, and at 5v/div., full-scale would be 20V. With the 9v battery applied, the DC deflection should be 1.8 divisions at 5v/div. Switching to 10v/div., the deflection should be just a bit less than one division. Internal to the scope (or perhaps accessible from the outside) are adjustments for the VERTICAL AMPLIFIER GAIN. Adjust this pot for the proper deflection described above. The procedure can be repeated with a 1.5v battery for the lower sensitivity ranges (which you'll be using more of the time anyway).

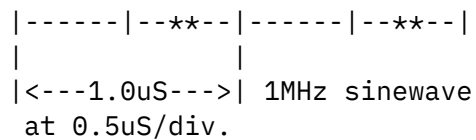
Also note that when you adjust the Vertical Amplifier Gain adjustment, the 0v (ground) reference on the bottom division may also shift. So after each adjustment, reposition the trace on the bottom division for 0V input, then recheck the trace position for the 9V or other test voltage you are using to calibrate against. It takes a few times going back and forth to get it right.

THE HORIZONTAL AMPLIFIERS should be checked/calibrated using a signal generator. For example, a 1 MHz signal has a period of 1uS per cycle. Setting the SWEEP RATE to 1.0uS/div., a 1 MHz signal should take EXACTLY one division per cycle. Ensure the horizontal WIDTH control is set so the beam starts at the first division and ends on the last one, and the HOR SWEEP VERNIER (fine adjustment) is in the OFF or CAL position. If the sweep rate appears incorrect, an internal SWEEP GAIN ADJustment can be set for proper display of the test signal. This should be repeated at different frequencies, and some scopes will have a separate adjustment for each time base setting. Once the Sweep Gain has been set as above for 1MHz = 1 cycle per division, go to the next faster sweep speed, which should

usually be 0.5uS/div. In this case, the 1MHz sinewave should take TWO divisions to display a complete cycle, as shown in the quasi-illustration to the right. Trigger the scope for a stable display so that the zero crossings



or the peaks are on the vertical graticle lines. The illustration shows the positive going "zero-crossings" occurring on the vertical graticles labeled "1" - "3" - "5".



For proper zero-crossings, the waveform should be centered between two divisions, also as shown in the illustration.

If you can't find the adjustment to tweak the horizontal gain, you can shrink or stretch out the test signal to the desired divisions using the HORIZONTAL WIDTH control, usually a front panel control. Then you can mark on the front panel where the HOR WIDTH control must be at each SWEEP setting for proper calibration.

Without checking and calibrating the accuracy of your time base sweep, time and frequency measurements performed on your scope may contain significant errors.

If you don't have a signal generator, you might use the audio from a receiver tuned to WWV. The various tones transmitted throughout the minute and hour are listed in various references. And of course, there's always 60-cycles floating around the ham shack somewhere!

MAIN OPERATOR CONTROLS.

INTENSITY - controls the brightness of the beam. Adjust for a clear trace, but not too bright. A very bright trace can cause permanent damage to the CRT, particularly on a well-used scope.

FOCUS - adjusts the beam for the thinnest and sharpest display.

VERT & HOR POSITION controls the vertical and horizontal position of the trace.

VERT VOLTS/DIV - controls the vertical sensitivity of the display, i.e., how many volts or mV per division.

VERT VERNIER - adjust the vertical sensitivity in fine steps. Should be off (or CAL position) for calibrated measurements.

TIME BASE/HOR SWEEP SPEED - sets the horizontal sensitivity, i.e., how many second, mS or uS per division.

HOR VERNIER - adjusts the horizontal sensitivity, or sweep speed, in fine steps. Should be in OFF or CAL for calibrated measurements.

OTHER ADJUSTMENTS YOU MAY FIND:

ASTIGMATISM - With the scope INTENSITY and FOCUS properly set, this adjustment compensates for the curvature of the CRT tube by making it in-focus across the entire sweep. If your trace is out-of-focus in certain areas, but in-focus elsewhere, the ASTIGMATISM needs to be adjusted.

TRACE ROTATION - is a small coil around the CRT that skews the trace to ensure it is perfectly horizontal. Set the scope to GND, free-run the sweep and adjust the vertical position so the beam is along a graticle (division) line. Adjust the TRACE ROTATION until the beam is perfectly parallel to the horizontal graticles. On scopes without this adjustment, leveling the trace is performed by loosening the CRT mounting brackets and physically rotating the CRT tube for a level trace, then re-tightening the CRT brackets.

!!! WARNING!!! HIGH VOLTAGE ARE PRESENT AROUND THE CRT TUBE. USE EXTREME CAUTION WHEN PERFORMING THE ABOVE PROCEDURE.

DC BALANCE - is a DC offset in the vertical amplifiers that causes a shift in the trace baseline when changing vertical scales. It is most obvious when displaying AC signals. For example, you are displaying a 10Vpp sine wave, centered on the center graticle at 2v/div. Changing to 5v/div, the sine wave shifts away from the center graticle, up or down ... that is, it assumes a DC bias error in the vertical amplifiers. The DC BAL is adjusted until no shift occurs when changing vertical scales. Admittedly, setting the scope for perfect dc balance on all scales is an exercise in patience! DC BAL is often an internal adjustment, or on the rear panel. On dual trace scopes, there will be one for each channel.

HV ADJUST - is the high voltage that controls the intensity of the trace. Turn up the INTENSITY control to its brightest position, then adjust the HV ADJ for a trace slightly brighter than normal intensity. Return the INTENSITY for normal brightness. The INTENSITY control now has the proper range. On some scopes, it takes a little piddling around to properly set the HV ADJ, intensity and focus for proper operation. The HV ADJ is often an internal adjustment.

!!! If you adjust the HV ADJUST, you may also have to recalibrate the VERTICAL and HORIZONTAL GAINS as described above for proper calibration (V/division and time/division accuracy).

An oscilloscope is an amazing instrument for making voltage, time and frequency measurements ... however, all of these measurements are worthless unless you ensure the vertical and horizontal stages of your scope are reasonably calibrated. The time to calibrate your scope will be worth the ease and reliability of subsequent measurements you will make.

END OF PART 1

72, Paul Harden, NA5N
NA5N@Rt66.com

Date: Tue, 17 Mar 1998 23:53:56 -0700 (MST)
From: Paul Harden <na5n@rt66.com>
To: qrp-1@Lehigh.EDU
Subject: [6253] Oscopes-2
Message-ID: <Pine.SUN.3.96.980317235318.29126G-100000@mack.rt66.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

OSCILLOSCOPES - BASIC USE AND MEASUREMENTS
by Paul Harden, NA5N

PART 2 - LET'S MAKE SOME MEASUREMENTS
DC voltages, AC voltages, time period and frequency

NOTE: This is a text version of an article appearing in the Summer 1997 issue of "QRPP." The article contains numerous illustrations and photos of oscilloscope displays, which unfortunately can not be included in a text file.

NOTE ON LIMITED BANDWIDTH SCOPES.

Today's scopes have 500MHz bandwidths or higher. Likely your scope is much less than that. A limited bandwidth scope is still very useful to the QRP'er. Say the bandwidth of your scope is 5MHz. This does not mean you can't see a 7MHz (40M) signal ... it just means that the calibration of the scope is no longer valid. The peak-to-peak value of the display is not correct and much smaller than it really is, and the sweep rate may be in error. But still, you may likely be able to resolve individual cycles higher than the cited bandwidth to a certain degree, and make the gain and phase measurements that follow (since they are based on RATIOS).

Most of the examples in this article explore many regions of a QRP rig without the benefit of any great bandwidth. Experiment with your scope to learn its limitations.

!!! IF POSSIBLE, SPEND THE MONEY TO GET A GOOD SCOPE PROBE AND MAKE MEASUREMENTS WITH A GOOD GROUND CONNECTION TO GET THE MOST OUT OF THE BANDWIDTH YOU HAVE.

BASIC MEASUREMENTS.

It is assumed you have your scope relatively calibrated as described in Part 1, and familiar with the front panel controls. For the sake of the following discussions (since illustrations can not be included), it is assumed the scope has 4 vertical and 4 horizontal divisions.

DC VOLTAGES.

Say you want to check the T-R switch (Transmit-Receive) in your QRP rig. Usually this will be a transistor (or inverter gate, such as in the 38-Special). The key line goes to the base, which is pulled HI to some positive voltage (on key UP), and goes LO to ground when the key is DOWN (or closed).

Setup your scope for DC voltage at 2v/div. and a slow sweep speed (say 100mS/div). Set the trace so the bottom graticle (division line) is 0v. Place the scope lead on the T-R switch transistor base. Say the trace deflects two divisions. This would be 4vdc bias on the base. Now close the morse code key. The trace should drop to 0v.

The purpose of the T-R switch is to generate a POSITIVE voltage on key down, which is taken from either the collector or the emitter (depending upon the circuit configuration). Say it comes off the emitter. Move the scope probe to the emitter. Now you should have about 0v with the key UP, and with the key DOWN, the voltage should jump to some positive voltage, often +12v. In this case, the trace will go off the top of the screen. Change the scope to 5v/div. Re-verify that 0v is the bottom graticle. On key DOWN the trace jumps up 2 divisions. The key DOWN voltage is thus +10v. If the emitter is "stuck" at +10v on both key up and down, the transistor is not switching. If the base signal above is correct, then likely the transistor is bad.

While this test could be done with a DVM, the integration time is slow requiring long key downs to get the proper voltage. A scope will also show you how clean the switching is, or if there is an AC voltage (or RF noise) riding on the T-R voltage.

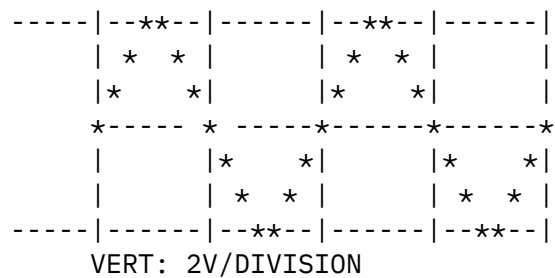
Scopes are thus good DC voltmeters, with about a 5% reading accuracy.

AC VOLTAGES.

Here is where a scope pays for itself by making AC voltage (and frequency) measurements. You must remember that AC voltage displayed on a scope is PEAK-TO-PEAK VOLTAGE, while a voltmeter or DVM measures AC voltage in RMS (root mean square). RMS voltages read on a DVM will be ABOUT 1/3rd the peak-to-peak voltage (Vpp) shown on a scope. Or specifically,

$$V_{rms} = .707 \times V_{peak} = 0.5(.707 \times V_{pp}) = .35 \times V_{pp}$$

If the signal on your scope looks like that in the quasi-illustration, at 2V/division, then the signal would be 4V peak-to-peak (4Vpp), or 1.4Vrms if read on a DVM or voltmeter.



For example, let's measure the output voltage and frequency of the sidetone oscillator in your QRP rig. Setup the scope for 1v/div, AC volts, and a sweep speed of 1mS/div. Connect the scope probe to the audio output of your rig and set the volume control on key DOWN so the audio sinewave is 2 division peak-to-peak. This would then be 2Vpp AC, and should look similar to the illustration above.

AC FREQUENCY MEASUREMENT.

With this same waveform, we might as well see what frequency our sidetone or transmit-offset is at. Most operators prefer the sidetone to be about 700Hz. With the same setup as above, trigger the scope for a stable waveform and the time base sweep to display 2 or 3 cycles. Center the waveform on the center horizontal graticle so the sinewave goes one division above, and one division below the center graticle. Now move the HOR POSition so the first "zero crossing" of the sine wave is on the first or second vertical graticle. With this setup, zero-crossing would be where the sine wave crosses the center horizontal graticle. Now measure the time it takes to make one complete sine wave, from one zero-crossing (sine wave going positive) to the next positive going zero crossing.

Say one complete sine wave takes one and half horizontal divisions. At 1.0mS/div., this would be 1.5mS per cycle. Frequency is the reciprocal of time, such that the sidetone frequency is:

$$f = 1/t = 1/1.5\text{mS} = 667 \text{ Hz}$$

(Sidetone frequency is the tone heard on key DOWN).

This may be a little low to your liking. To raise it to 700Hz, calculate the period of 700Hz, which is $t = 1/f = 1/700 = 1.4\text{mS}$. At 1.0mS/div, you can adjust your XMIT OFFSET on key down until zero-crossings (or the positive peaks) are 1.4 divisions apart. This will be 700 Hz. (The XMIT OFFSET is not adjustable in all rigs ... such as the 38-Special. In this case, it usually requires changing the value of a capacitor on the XMIT MIXER and usually discussed in the instruction manual).

QUALITY OF THE WAVEFORM is another feature of a scope that is

unsurpassed, since you are "seeing" the waveform in real time. For example, say the audio output from your QRP rig is not a clean sine wave, that is, it has a slant to it, or the rise time takes longer than the fall time. This could be due to improper time constant on the audio amplifier coupling capacitors or improperly biased amplifiers. Or, say the audio output sine wave is flattened at the top, looking sorta like a square wave then a sine wave. This would be a raspy sounding sidetone, and due to the audio power amplifier being overdriven and in gain compression (clipping). You should be able to see this effect by turning the volume control to its maximum level, overloading the output audio amplifier (unless your QRP rig has anemic audio like some).

The o-scope is an invaluable tool for detecting and diagnosing such distortions and impurities in the signal quality. The audio output of a QRP rig, whether the sidetone or an on-the-air signal, should be a fairly pure sine wave. If not, something is wrong, from a poor product detector action, poor filtering after the product detector, poor coupling capacitors, or severe noise being introduced into the audio at some point.

By tuning in an on-the-air signal and plotting the Vpp at different audio frequencies, you can plot the filter response of your QRP rig. This will be discussed in detail in a later section. You can also adjust your BFO on the product detector for the maximum Vpp of the received signal for centering the signal in the filter passband. Note how these important tests and adjustments (sidetone, filter response and setting the BFO) are a few of the things that can be done on a scope with a very limited bandwidth ... since you're not looking at anything beyond the audio range.

Once you get comfortable making the above voltage, time and frequency measurements, you might want to go through your QRP kit with the schematic and record the various DC and AC voltages and waveforms at pertinent locations in the circuit. This will be a great aid in the future should your rig develop a problem. NOTE however, that signal levels from the receive mixer through the IF crystal filters are VERY weak and can not be seen on even an excellent scope. The main exception to this would be the local oscillator (LO) drive on pins 6 and 7 on a NE602. They are usually in the order of 100mVpp.

!!! NOTE: You can't hurt anything by probing around the circuit of your QRP rig. The biggest mistake made by beginners is to let the ground lead come loose and drag along the tops of components, which can short out the power supply or damage a component ... OR when putting the scope probe on an IC pin, to slip and let the probe touch two pins at once. This will short out the two pins, which in some cases, could cause damage to the IC. For

example, on a NE602, measuring the Vcc voltage on pin 8. A slip to Pin 7 (the OSC input) could destroy the internal oscillator if the pin 8 to 7 short persisted a second or two.

END OF PART 2

72, Paul Harden, NA5N
NA5N@Rt66.com

Date: Tue, 17 Mar 1998 23:55:10 -0700 (MST)
From: Paul Harden <na5n@rt66.com>
To: qrp-1@Lehigh.EDU
Subject: [6254] Oscopes-3
Message-ID: <Pine.SUN.3.96.980317235416.29126H-1000000@mack.rt66.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

OSCILLOSCOPES - BASIC USE AND MEASUREMENTS
by Paul Harden, NA5N

PART 3 - LET'S MAKE SOME MEASUREMENTS
Amplifier gain and insertion loss

NOTE: This is a text version of an article appearing in the Summer 1997 issue of "QRPP." The article contains numerous illustrations and photos of oscilloscopes displays, which unfortunately can not be included in a text file.

AMPLIFIER GAIN

The gain of an amplifier can be measured in terms of VOLTAGE GAIN, which is simply $A_v = V_{out}/V_{in}$. For example, if the input to an amplifier is 1Vpp, and the output is 4Vpp, then the amplifier has a VOLTAGE gain of 4.

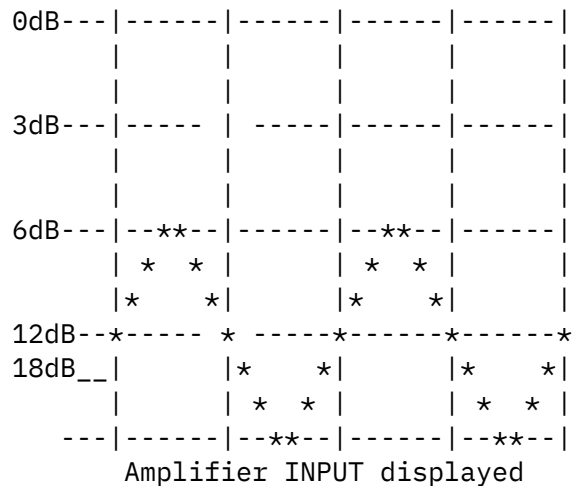
GAIN IN DB is often more useful and is how the gains of amplifiers are usually expressed. With dB (decibels), everytime you DOUBLE the AC voltage, you ADD 6dB of gain. It is the RATIO of output to the input, and this RATIO is easy to measure on a scope, even for

signals that exceed the cited bandwidth of your scope to some extent.

Say you just built a single transistor amplifier to boost the audio signal before the final audio amplifier (usually an LM386). It is often easier to start with the OUTPUT for measuring amplifier gain. Inject an audio signal into the amplifier (transistor base). Place the scope lead on the transistor COLLECTOR, and set the scope so the output waveform is exactly 4 divisions peak-to-peak. Do not disturb oscilloscope settings.

Now move the scope leads to the amplifier INPUT, the transistor's base. You will of course have a much smaller signal, and the ratio of the input to the output will be the gain in dB. For example, say the input signal is 2 divisions peak-to-peak. This would be 6dB of gain, since you are DOUBLING the signal in the amplifier. Everytime you DOUBLE the voltage, it is 6dB of VOLTAGE gain. If the input signal is 1 division peak-to-peak, then the amplifier gain is 12dB. (With the output still at 4Vpp or 4 divisions). Going from 1 division to 2 division is 6dB gain; going from 2 divisions to 4 divisions is 6dB gain. Therefore going from 1 division to 4 divisions is 12dB (6dB + 6dB).

This illustration shows how to measure Amplifier GAIN on an oscilloscope. FIRST, adjust the scope so the amplifier OUTPUT is 4 DIVISIONS peak-to-peak. THEN, switch to the INPUT, and position the waveform so the NEGATIVE peaks are on the bottom division, as shown. Where the POSITIVE peaks of the input occur will be the GAIN in dB by reading the scale on the left. You may want to make such a scale and attach it to the side of your CRT screen for making quick measurements in dB's.



IF YOU WANT TO DO IT MATHEMATICALLY ...

$$V_{out} = 4V_{pp}$$

$$V_{in} = 1V_{pp}$$

$$\text{Therefore, voltage gain } A_v = V_{out}/V_{in} = 4v/1v = 4$$

and gain in dB is:

$$dB = 20\log(A_v) = 20\log(4) = 20(0.602) = 12dB$$

OR AS SHOWN DIRECTLY ON THE O-SCOPE AS DESCRIBED ABOVE.

Since this is a relative measurement (a RATIO), the absolute value of Vin or Vout does not need to be determined.

INSERTION LOSS.

In some circuits, such as filters or attenuators, the LOSS in dB needs to be determined, and this is called the INSERTION LOSS. It is determined the same way as amplifier gain, except the INPUT will be GREATER than the OUTPUT since there is a LOSS involved.

For example, with a signal generator connected to your QRP rig antenna input, you want to measure the insertion loss of your IF crystal filter. At the filter input, you can just barely squeek out 2 divisions of input signal on your scope at its most sensitive setting. (Perhaps due to exceeding the scope's bandwidth). The output from the crystal filter is 1 division, or a 50% reduction. The insertion loss would be 6dB (since if the power were HALF, or 50%, it would be a 6dB LOSS).

OR MATHEMATICALLY USING SCOPE DIVISIONS:

$$\begin{aligned}\text{Insertion loss (dB)} &= 20\log(V_{in}/V_{out}) = 20\log(2 \text{ div.}/1 \text{ div.}) \\ &= 20\log(2) = 20(.30) = 6 \text{ dB}\end{aligned}$$

If the output were 1.5 divisions,

$$\text{Insertion loss (dB)} = 20\log(2 \text{ div}/1.5 \text{ div}) = 2.5 \text{ dB}$$

Again, you are determining the insertion loss of a circuit element from the RATIO of input to output. You do not need to make absolute measurements. So if the frequency is beyond the bandwidth of your scope, as long as you can get enough vertical deflection to measure it's magnitude in some terms of divisions, and able to see the signal either get smaller or larger, you can estimate the gain or loss in dB fairly accurately. If the signal DOUBLES, it is 6dB; if it is about half of doubling, it is about 3dB; if the change is barely noticeable, it is around 1dB. This is usually sufficient for determining if circuit elements are working properly. For example, using the insertion loss of an IF crystal filter as above, if you determine the loss to be a few dB, the crystal filter loss is acceptable. If it is much more than around 6dB, you may have a problem. And if you can't see any output, you have a real problem. (Loss is about 1 to 1.5 dB per crystal in filter). Same with checking the gain of amplifiers. It's not important if the gain is 6.2 dB or 6.5 dB, but whether the gain is ABOUT what you'd expect. If the output of an amplifier is ABOUT DOUBLE the input, you have 6dB of gain. If the output is just a bit larger than the input (or the same) ... then you've got a problem (no or little gain occuring).

With a little practice on your o-scope, you will learn to recognize approximate gains and losses in dB's very quickly from the oscscope display.

You might want to go through your QRP kit with the circuit and measure the gains through different stages. If your rig has an MC1350 IF amplifier, what is it's gain with a strong signal vs. a small signal to see if the AGC is working properly. What is the gain of the LM386 audio output amplifier? With larger bandwidth scopes, check the gains of the RF driver transistor and output PA transistor. Knowing what these gains are could help troubleshoot the circuit later should a problem develop.

END OF PART 3

72, Paul Harden, NA5N
NA5N@Rt66.com

Date: Tue, 17 Mar 1998 23:56:08 -0700 (MST)
From: Paul Harden <na5n@rt66.com>
To: qrp-1@Lehigh.EDU
Subject: [6255] Oscope-4
Message-ID: <Pine.SUN.3.96.980317235529.29126I-100000@mack.rt66.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

OSCILLOSCOPES - BASIC USE AND MEASUREMENTS
by Paul Harden, NA5N

PART 4 - MEASURING PHASE SHIFTS

NOTE: This is a text version of an article appearing in the Summer 1997 issue of "QRPP." The article contains numerous illustrations and photos of oscilloscopes displays, which unfortunately can not be included in a text file.

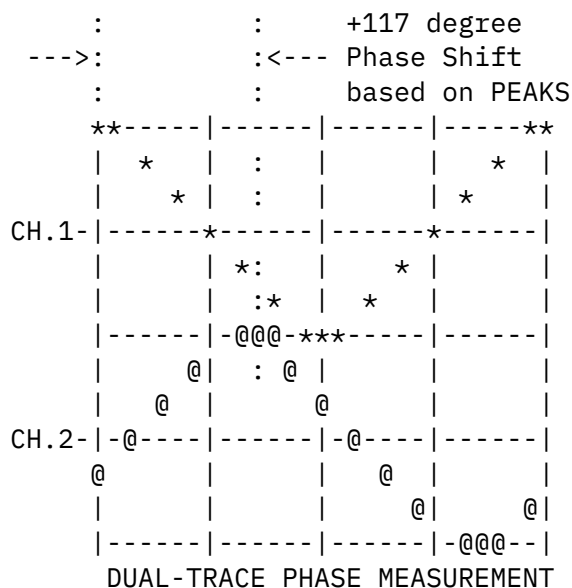
MEASURING PHASE SHIFTS

Phase relationships between two signals at the same frequency can be measured with 2-5 degree accuracy with a scope, although more suited for a dual-trace scope. The REFERENCE signal is applied to CH. 1 and the signal to be phase measured to CH. 2. For proper phase measurements, ensure your dual trace display is in the CHOPPED mode, not ALTERNATE mode. (Alternate mode can effect the triggering position for the second, or CH.2 sweep).

There are many methods to do this. One is to stretch out the signal so it takes 4 full divisions, so each division is 90 degrees of phase. By measuring from a common point on one signal to the other (zero crossings or from the peaks), the phase can be measured.

For example, say you are making a phased array antenna system, in which one feedline must cause a 90 deg. delay. You calculate the electrical length for a quarter wavelength [$L = (246/f) \times \text{velocity factor}$] and cut the coax to that length. You are now working on blind faith that you have exactly 90 degrees. With a scope, you can measure it fairly accurately by injecting a signal into one end with a signal generator (at the frequency of interest) and a 50-ohm load on the other. Connect the scope CH.1 to the coax input (signal generator end) and CH.2 to the load end and measure the phase. Trigger the scope and move the horizontal position and/or the time base vernier so the positive peak of the CH.1 sinewave is on the first vertical graticle line and the

second positive peak is on the fourth vertical graticle, as shown in the illustration to the right. Now measure the phase by noting where the first positive peak on CH.2 occurs. Say it occurs about 1.3 divisions to the RIGHT of the CH.1 positive peak. Since one division is 90 degrees, using this method, then $1.3 \text{ div.} \times 90 \text{ deg.} = 117 \text{ deg.}$ YOUR DELAY LINE IS TOO LONG! Cut off an inch or two at a time until the CH.2 peak is one division from the CH.1 peak (or on the 2nd vertical graticle as shown in the illustration) for precise tuning of the delay line.



Another method is to make the CH.1 signal to be two divisions high, and center it between the two divisions, such that the zero-crossing points are on the middle graticle line. Where the CH.1 sinewave

signal crosses zero going positive is the 0 deg. REFERENCE; the positive peak is 90 deg.; the negative going zero crossing is 180 degrees, etc. For CH.2 to be 90 degrees delayed from CH.1, the CH.2 sinewave should cross zero, going positive, right under the 90 degree peak of the CH.1 signal. If the CH.2 zero crossing is farther to the right from the CH.1 positive peak, the phase shift is MORE than 90 degrees. Back to the example of the coaxial delay line, you would cut an inch or two at a time until the CH.2 zero crossing is directly underneath the CH.1 positive peak (the 90 degree point).

0	90 degrees
:	:
:	:
---** ----- -----**----	
* *	* *
* *	* *
Z---- Z--- Z-- Z-	
* * * *	
* * *	
----- -----**----- -----	

Z=Zero-crossing points

And still yet another method of comparing the phase between two signals on a dual-trace scope is to accurately measure the period it takes for one complete sine wave on the CH.1 reference channel. Say it is 140nS (that would be 7.14 MHz, by the way). Now say the CH.2 signal is 50nS delayed from the CH.1 signal. The phase shift would be:

$$\text{Phase} = 50\text{ns}/140\text{ns} \times 360 \text{ degrees} = 129 \text{ degrees}$$

POSITIVE OR NEGATIVE PHASE SHIFT?

One thing you must remember is how to "read" phase shifts on an oscilloscope. When comparing two signals as described above, remember that if the CH.2 signal peak is to the RIGHT of the CH.1 peak, then the CH.2 signal is OCCURRING LATER IN TIME than the CH.1 signal, because time is traveling from left to right. If the CH.2 peak is say 90 degrees to the LEFT of the CH.1 peak, then the CH.2 signal occurred in time BEFORE the CH.1 signal. This would then be a -90 degree phase shift, or 270 degrees. Think about this carefully before you start cutting the coax on that delay line!

PHASE MEASUREMENTS ON A SINGLE TRACE SCOPE

Phase measurements can be made on a single trace scope as well. First, connect the REFERENCE signal, using a BNC "T", to both the VERTICAL INPUT to the scope and the EXTERNAL TRIGGER and select EXTERNAL as the trigger SOURCE. Adjust the TRIGGER LEVEL so the zero-crossing occurs at the beginning of the trace on the first vertical graticule. Now remove the reference signal from the scope's vertical input (but NOT the external trigger input) and connect the signal to be phase measured to the vertical input ... WITHOUT altering the time base or trigger level. The sinewave of the signal to be tested should be on the CRT, with the trace being triggered from the external

trigger input, or the reference signal.

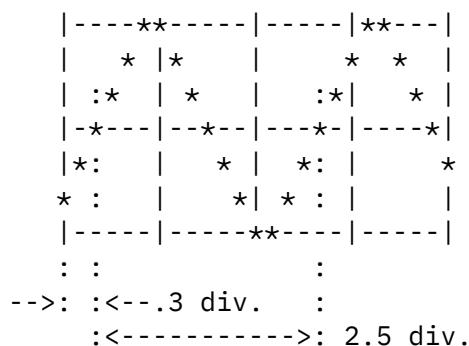
The sinewave now on the CRT

likely will not have it's zero-crossing starting at the first vertical graticle as the reference signal did, but some place else.

On the illustration to the right, the zero crossing occurs about 0.3 divisions to the RIGHT. This can now be converted to the phase angle in degrees. In the illustration, one complete cycle takes 2.5 divisions, and the phase delay from the reference is 0.3 div.

The phase shift is therefore:

$$\begin{aligned}\text{Phase shift} &= 0.3 \text{ div} / 2.5 \text{ div.} \times 360 \\ &= 0.12 \times 360 = 43 \text{ degrees}\end{aligned}$$



SINGLE TRACE SCOPE
PHASE MEASUREMENT

The SINGLE-TRACE scope method is a little easier to do if you make the sine wave of the reference to be 4 divisions for one cycle, thus making 90 degrees per division. The phase angle can be guestimated a little quicker with the signal to be phase measured.

It is noteworthy to mention that the above examples, measuring the phase through a delay line at 7 MHz, would require an oscscope with a 20MHz or higher bandwidth, if for no other reason, then just assure that the time base is fast enough to display 1 or 2 sinewave cycles on the CRT. If at your fastest sweep speed, the 7MHz signal is displayed as many cycles, then obviously the accuracy that you can determine the phase angle will be highly degraded.

LOW FREQUENCY PHASE SHIFTS ON A LIMITED BANDWIDTH SCOPE.

If your scope has a limited bandwidth of only a few MHz or less, there are still useful phase measurements that can be performed.

One interesting experiment is to measure the phase shift of the audio signal at different frequencies as it travels through the stages in a CW audio filter. This is done by putting the input to the CW audio filter on CH.1 and the output on CH.2. What is the phase shift of the wanted vs. unwanted frequencies? Recall that an audio filter works by cancelling out (180 degree phase shift) the unwanted signals, while re-enforcing (0 degrees) the frequencies you wish to pass. There will only be one audio frequency for which there is a 0 degree phase shift. This will be the "pole frequency" of the active filter, or the frequency you wish to have the maximum gain. For CW QRP rigs, this should be around 700 Hz.

And finally, on a limited bandwidth scope, the phase angles of higher

frequencies can be determined by applying the reference signal to the vertical input and the signal to be phase measured on the external horizontal input. This will form a lissajous pattern, the angle or tilt will signify the phase angle.

END OF PART 4

This is the last part of this series of articles on OSCOPES posted to QRP-L. There will be another series on scope measurements posted in the future (many months) that will include some advanced techniques, such as measuring sideband rejection, tuned circuits, filter responses, group delay, VCO phase noise, etc. This will be the contents of part 2 of the oscscope article for the Winter QRPP. I haven't written it yet or made hardcopies of the scope displays. But following publication in QRPP, I will convert it to a text file and post it to QRP-L as I did this one.

PS - making those waveform illustrations really sucked swampwater!

72, Paul Harden, NA5N
NA5N@Rt66.com

Date: Wed, 18 Mar 1998 01:56:51 EST
From: SABorns <SABorns@aol.com>
To: qrp-l@Lehigh.EDU
Subject: [6256] New QRP Book
Message-ID: <6d895e71.350f7035@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Gang,

Dave Ingram K4TWJ (CQ Magazine Columnist) is publishing a new QRP book entitled QRP Now. He will be selling the new book direct. The price is \$15 US plus \$2.00 shipping. First copies will be available early to mid April.

Books can be ordered from: Dave Ingram, K4TWJ
4941 Scenic View Drive
Birmingham, AL 35210

73, Steve K8IDN

Date: Wed, 18 Mar 1998 00:04:14 -0700 (MST)
From: Joe Gervais <vole@primenet.com>
To: qrp-1@Lehigh.EDU
Subject: [6257] QRP WAC Award
Message-ID: <199803180704.AAA29977@usr07.primenet.com>

Howdy Folks,

I was cruising the ARRL website to look up the requirements for WAC and noticed that they give out QRP endorsements with the award! Bless their warm furry hearts! Maybe we could have them talk to the DXCC zealots. :)

Anyway, hope to have a QRP WAC piece of paper on the wall as soon as I get a few QSLs in. Odd part was that the WAC Award requirements state, "The Worked All Continents award is issued for working and confirming all six continents (North America, South America, Oceania, Asia, Europe and Africa)."

Now granted, I only took undergraduate geology, but I'm quite sure I learned that we had *SEVEN* continents on this watery planet of ours. Where the heck did Antarctica go? Sure it's a frozen wasteland filled with randy flightless fowl, but it's still one of the *SEVEN* continents.

Can I at least staple my Antarctic QSL to my QRP WAC and feel better? :-)

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"Every man dies. Not every man really lives." -- Braveheart

Date: Tue, 17 Mar 1998 23:19:31 +0000

From: Frank G3YCC <g3ycc@g3ycc.prestel.co.uk>
To: AC6JA@aol.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [6258] Re: SG-2020 Delivery Schedule Delayed, AGAIN!!!
Message-ID: <AiT00AADUwD1Ew22@g3ycc.prestel.co.uk>
MIME-Version: 1.0

In message <980bbe57.350ef80b@aol.com>, AC6JA <AC6JA@aol.com> writes
>i wouldn't hold my breath and anticipate anytime before may or june!
The local UK suppliers told me today their stock was not now expected
'until April', having advertised 'end of February'. Looks like we are in
for a wait. I wonder why? The prototype received by them was very good
apparently, well made and got good reports on the air. It would be nice
to know the firms reason/excuses. On the price, the UK quoted price is
now 599 UKP - 900 USD. Bit different from the price on the web page...
600 odd USD...

--
Frank G3YCC GQRP 042 (email g3ycc@g3ycc.prestel.co.uk)
QRP Web Page: <http://www.homeusers.prestel.co.uk/g3ycc/>
Packet: G3YCC@GB7HUL

Date: Wed, 18 Mar 1998 07:35:53 +0000
From: Frank G3YCC <g3ycc@g3ycc.prestel.co.uk>
To: "'gqrp-1@blacksheep.org'" <gqrp-1@blacksheep.org>, qrp-1@Lehigh.EDU
Subject: [6259] High flying antenna
Message-ID: <xFFynBAZl3D1Ewi5@g3ycc.prestel.co.uk>
MIME-Version: 1.0

In our local newspaper last night, there was an account of a homing
pigeon becoming impaled on a TV antenna. The occupier of the house first
of all thought the poor thing had flown it's last, but then noticed a
slight movement. He called the RSPCA who confirmed it was still alive.
They in turn called the fire brigade who rescued the bird which later
was nursed back to life. However, the other side of the story,
appropriate to radio maybe, was that the TV reception was 'drastically
improved'! It had been 'fuzzy for some while', but now there was crystal
clear reception!

The moral of the story - I'm not quite sure, but I hope I don't see too
many beams with pigeons flapping away impaled on the elements!

: -)

--
Frank G3YCC GQRP 042 (email g3ycc@g3ycc.prestel.co.uk)
QRP Web Page: <http://www.homeusers.prestel.co.uk/g3ycc/>
Packet: G3YCC@GB7HUL

Date: Wed, 18 Mar 1998 03:08:40 EST
From: Dquagliana <Dquagliana@aol.com>
To: qrp-1@Lehigh.EDU
Subject: [6260] NE QRP 98 Meeting report and Photos online!
Message-ID: <47937a4d.350f810a@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

NE QRP 98 at ARRL HQ
Meeting Report and Photos Online!

I meet Joe N2CX and Rick N3QEN at the usual Fuddrucker s parking lot around six in the morning and we dash off to northern NJ to pick up the rest of the NJQRP crew. Rick has his Garmin GPS and tracks the trip all the way to ARRL HQ (and most of the way back). At a mall in north Jersey we get together with George N2APB and Clark WA2UNN. With both vans together now, we move some equipment and throw the mobile HF antenna on the roof. Joe pulls a small box out of his bag and after a few moments of knob fiddling confirms a 1.9 SWR at 7.033 Mhz. Good enough we agree. Everyone piles into the van and.... we re off !

Pulling into ARRL HQ we spot Preston s car and a strangely familiar shape emerging from the car with a box of donuts. Yes, it s Preston s surprise: Chuck himself.

I cut out of the formal part of the meeting a few minutes early to start setting up the satellite QRP demo. Mike KC1SX helps with the setup and soon everyone else is outside waiting for the show to start. Bill W1PA and Joe help out during the satellite pass while I work at trying to get a word in edgewise on AO-27 with a QRP uplink. With the mission accomplished, everyone heads back inside. (Did anyone take pictures of the satellite demo? If you did, can I *please* get a copy? Email me!) Back inside to finish the meeting (and finish off some more doughnuts). Dave NN1G gives a talk on his new radio and then it s show and tell time. Wow! Lots of neat stuff: radios, including a smite in an altoids tin (that smite is tiny!), a WM-20, a double-decker four-knob something and the Rainbow Analyzer.

Then, it s off to lunch at Vito s pizza place. Joe takes out his QRP LED keychain light and soon a mini laser war erupts with everyone firing red blasts across the table.

Back to HQ. Several groups start operating W1AW as others look on... then it s off to the lab with Zack W1VT. The lab is amazing. You have to

see it to believe it. Electronics equipment of all kinds. Four desk/tables in the middle filled with projects. Lockers full of radios. More equipment. A tripod with a forest of dish antennas growing from the mast stands between two of the desks near a large stack of macadamia nut cans. A separate adjoining room contains lots of heavier equipment and more dish antennas. Arranged on the shelves in the lab are some items most of us recognize from articles in QST or the ARRL handbook. Among the items are a microsat power module, a microsat mockup complete with tape measure antenna and an S-band helix antenna (okay, okay, there were also several QRP items with their articles from QST... :-))

Wandering around the lab I spot the Tuna Tin (yes, *THE* Tuna Tin) on Ed Hare's desk. Chuck is quickly propositioned into posing for several photos with it. Later, on Zack's desk, I spot a stack of PC board boxes I recognize as bandpass filters and another device I think might be a hyperspatial field generator (Darn, it was just some microwave gear.)

Before we knew it, it was time to head home.

Soapbox (all in jest -- names deleted to protect the guilty):

Hey, is that Chuck? --- Boy, there's plenty of donuts here...hey, what? no coffee? --- How far is that...well it's about the same as the distance from Austin to Dallas. --- Where's lunch? Lunch talk-in on 52. --- We're with a group. Oh, *those* guys are in the back room. --- That guy is banging on those paddles. You're not supposed to bang on the paddles. --- No, the macadamia nut cans are for 5 GHz wave guides. --- Seems like a lot of the things I start get out of hand. --- The camera moved! (as we try for the *third* time to take a group photo with a camera precariously balanced on a bike rack...)

You can view some of my photos (including Chuck with the original Tuna Tin) on the web at:

<http://members.aol.com/dquagliana/neqrp98/neqrp98.html>

If you can identify any of the people in the group photo, or if you have photos from NE QRP 98 (especially any of the satellite demo) please send me email!

Doug Quagliana, KA2UPW dquagliana@aol.com
Satellite/QRP/Mobile <-- all at the same time!! Ask me about it!!
or read all about it: <http://members.aol.com/dquagliana/beginner.html>

Date: Wed, 18 Mar 1998 00:32:35 -0800
From: Conrad <radman@best.com>

To: "'qrp-1@Lehigh.EDU'" <qrp-1@Lehigh.EDU>
Subject: [6261] Fluke RF probe summary...
Message-ID: <01BD5205.595504A0@radman.vip.best.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: quoted-printable

Hopefully of use:

For those interested in obtaining the Fluke 85-RF probe at the =
discounted price of \$19.95 -- there are some still available at Radar, =
Inc in Seattle. (206-282-2511 attn: Kevin.)=20

I contacted Fluke support engineering regarding a concern I had re: the =
use of the 85-RF probe with auto-ranging DMMs. It seemed to me that =
there could be loss of accuracy (or resolution) with some auto-ranging =
DMMs. "Not so!", according to the folks at Fluke. Use of the 85-RF is =
fully supported on the entire family of Fluke auto ranging meters =
including the 10 Series, 70 Series, and 80 Series. In addition, it is =
Fluke's opinion that *any* auto-ranging DMM that has a 10 meg-ohm input =
impedance - that does not change impedance as it ranges will also =
function perfectly with this probe. (good news!) Operation is 1.0 V rms =
at the probe tip yields a reading of 1.0 VDC at the DMM. The DMM will =
sort out which range it "wants" without affecting accuracy. So, just set =
the meter to DC volts and you're good to go. (quite simple.) If your =
meter's impedance does not play by the rules -- only then will you have =
to shunt the input impedance accordingly.=20

There are, however, cautions from Fluke regarding signal levels. These =
cautions pertain to your own safety as well as avoiding damage to the RF =
probe:=20

"CAUTION: To avoid probe damage, the dc component of the input signal =
must not exceed 200 volts, including transients. 30 VAC rms and 200 V DC =
are the *maximum* inputs to the probe. This allows measurements of an AC =
signal riding on a DC voltage of up to 200V. The input capacitor charges =
to the peak value of AC plus DC. If the DC level is then changed by more =
than 200 V, the resulting transient may damage the probe. The chance of =
damage can be minimized by discharging the input capacitor at the end of =
each measurement. This is done by momentarily touching the probe tip to =
the ground clip."=20

The engineer I spoke with emphasized that the "fusible links" in this =
probe are the two diodes in the probe body: one Germanium and one =
Silicon. If you exceed the limits outlined above, you'll instantly blow =
both diodes. But, don't throw the probe away! The diodes are =
replaceable: Part numbers 629251 and 639922. Both diodes are "Fluke =
selected parts." Cost: \$10.04 and \$2.99 respectively. (ouch! yet, =

cheaper than buying a new probe.)

Perhaps it's best not to probe that old transceiver with the dual 6146s =
and its associated tank circuit as your first experiment (?)! Not that =
anyone on this list would own one of *those* rigs anyway ;) ... the =
usual disclaimers, etc, etc.=20

Happy measurements... and hope this helps,

72 - Conrad - nn6cw.

Date: Wed, 18 Mar 1998 03:57:52 -0500
From: N4JS <n4js@pobox.com>
To: qrp-l@Lehigh.EDU, klqrp@waterw.com
Subject: [6262] Pictures on Web Page
Message-ID: <v03110707b1353bedc009@[206.106.174.44]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I got some pictures of some of my latest kits. The SMiTe (which is working
well now), and I put in a little 1.5X1.5 Hammond Aluminum box, the NC40A,
and the Cascade I just finished. All are linked from my QRP page
<http://www.qsl.net/n4js/qrp.html>.

I am almost finished my NorCal paddles. They look sharp with the Stainless
Steel base. Will post as soon as all complete. (Want to give brass parts
one more go at the polish).

 / _/_ _/_ _/_ _/_ _/_/_/_ John L. Sielke
n4js@pobox.com
 //_ _/_ _/_ _/_ _/_ _/_ n4js@qsl.net NJ
Grid:FM29LN
 / _/_ _/_ _/_/_/_ _/_ _/_/_ http://www.qsl.net/n4js
NJ-QRP #57
 / _/_/_ _/_ _/_ _/_ _/_ QRP-L #884 QRP-ARCI
ICQ# 3789653
 / _/_ _/_ _/_/_ _/_/_/_ QCWA CQrp CQC ARS
#243 FISTS #2781
 G-QRP #9544 Norcal #1989 ARQrp, AKQrp Formerly: K3HLU, W7JEF, W4MPC,
TF2WKT

Date: Wed, 18 Mar 1998 06:45:36 -0500
From: "Harry Hurst" <hhurst@delaware.infi.net>
To: <qrp-l@Lehigh.EDU>
Subject: [6263] For Swap
Message-ID: <199803181138.GAA24336@fh101.infi.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

NT Workstation 4.0 for swap. Comes with CD, licence, reg. card, skinny manual, "Dummies" quick ref guide, also NT resource kit CD (no docs). This is Bill's QRO operating system. Looking for QRP related stuff.
hhurst@delaware.infi.net OR harryhurst@aol.com

Amateur Radio - WA3PTG

--... ..-- -- .- ...-- .-- . - --.

QRP-L #1464
Wilmington DE

Date: Wed, 18 Mar 1998 07:13:02 -0500 (EST)
From: Bob Patten <n4bp@bc.seflin.org>
To: "Harvey D. D. Hetland" <n6mm@earthlink.net>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [6264] Re: QSB, what to NOT do in a QSO
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Tue, 17 Mar 1998, Harvey D. D. Hetland wrote:

> Yep, I've had it happen. On the second try I have even resorted to
> sending, "RST ONLY" (or whatever I need) to get only what I need. Often
> the inexperienced operator will get the message and send only what is
> needed. One value of having worked traffic nets is that you learn
> efficiency both in getting and sending fills. Foxhunts (and contests)
> are good experiences in this regard as well. Most QRP rigs have full
> QSK, which can facilitate getting fills. - 73, Harvey, N6MM.

>

I don't use QSK myself, but this is one instance where I really appreciate it! If the guy starts sending my call and/or his call, I'll first try a short string of dits to see if I can interrupt him. If he stops, I'll ask "RST?" or whatever info I need. Very often works!

73,

Bob Patten, N4BP (0 0) Plantation, FL
-----o00o-()-o00-----

E-Mail: n4bp@bc.seflin.org
Web Page: <http://wg104a.wh.uni-stuttgart.de/~n4bp>
Brass Pounder BBS: (954) 472-7715

Date: Wed, 18 Mar 1998 07:57:58 EST
From: NF9K <NF9K@aol.com>
To: qrp-1@Lehigh.EDU
Subject: [6265] toroid wire
Message-ID: <6c026bde.350fc4d8@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

All,

I am wrapping the toroid for the 38S 5W mod, and have no magnet wire sitting around. I went to my local Radio Shack and found that they had none. i couldn't even find where it should be, as if they don't stock it anymore. They did have "30-guage wrapping wire". Is this stuff suitable for winding inductors?

thanks in dvance for the advice,
Joel, NF9K

Date: Wed, 18 Mar 1998 08:07:33 -0600
From: Gary Wilcox <rwilcox@newton.cacky.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [6266] FS Ten Tec C21
Message-ID: <350FD525.8353D90A@newton.cacky.com>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

I have an analog Century 21 for sale. Radio works great, has a few scratches. New finals about 6 months ago and PTO rebuild. Would like to get \$150. Located in Owensboro, Ky.

PS Have an original Manual.

73's Gary Wilcox
rwilcox@newton.cacky.com

Date: Wed, 18 Mar 1998 08:58:15 EST
From: Bensondj <Bensondj@aol.com>
To: qrp-1@Lehigh.EDU
Subject: [6267] Elmer101 / SW-40+ update
Message-ID: <ce153616.350fd2fa@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

gang -

Good news- here's the status on the 'Elmer101' rig:

I completed verification of the new board yesterday evening- it looks really nice. I just turned on the board production run, and as soon as I have a committed ship date I'll update the status report.

The manual is virtually complete- I'm just tweaking at this point. Copies went out to the 'Elmers' yesterday for their use. Several 'beta-test' kits have shipped or are shipping today. I've already started kitting, that'll pick up this weekend. With the exception of the boards themselves, I've got all parts in hand or due here today.

I hope to have images up to a website shortly.

Patience, please- send no money yet. I'll make an "open for business" announcement when I have a better fix on the board delivery.

73, Dave - NN1G

-
"We will sell no rigs before we're darned good and ready!"

-

Date: Wed, 18 Mar 1998 08:00:52 -0600
From: "Walter Dufrain" <walter@inlink.com>
To: <vintage@best.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [6268] Re: SG-2020 Delivery Schedule Delayed, AGAIN!!!
Message-ID: <199803181403.IAA09334@thor.inlink.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Hi Bob and All,

The SGC is not the only company to pull this tactic, over the years Ten Tec has done the same thing.

Maybe the manufacturers should adopt the Dave Benson NN1G attitude, "We sell no rigs before they are developed"

Just my 2 cents.

Walter AG5P Wright City, Missouri

>
> It is unfortunate that a company announces a hot, new product only to
> delay it's shipping again and again. Being on the development side of
> things, I've personally encountered, nay been responsible for, this
> phenomenon. As they say, 'Stuff Happens', but it's often avoidable if

Date: Wed, 18 Mar 1998 09:10:51 -0500
From: "Buck Switzer" <n8cqa@tir.com>
To: <frank001@postoffice.worldnet.att.net>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Cc: <n8cqa@tir.com>
Subject: [6269] Re: HW-8 article
Message-ID: <199803181408.JAA26779@sun.tir.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1

Content-Transfer-Encoding: 7bit

Frank - The series you are refering to is in CQ magazine from 1977. I may still have the issues (I think there were 4), will have to look in the basement. That series got me back into ham radio in 1977!! Remember it well. The autor was Ade Weiss, W0RSP.

72/73 Buck N8CQA

Date: Wed, 18 Mar 1998 09:51:19 EST
From: "Brian Jones" <brian_jones@uk.ibm.com>
To: qrp-1@Lehigh.EDU
Subject: [6270] Antennas from a hotel
Message-ID: <199803181451.JAA48816@nss4.cc.Lehigh.EDU>
MIME-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit

Looks like the business travel is going to get more this year and maybe the rare KB8YKJ call will get aired on QRP CW - normally I just bring a 2m/70cm HT over with me.

Anyone done much operating from hotel rooms? What did you use for antennas - I'd like to use my MFJ 9020 (and eventually my 38Special when I replace the fried IRF510 and my Elmer101 40m rig when finished). I was thinking of say shortening a dipole by inductively loading by wrapping some length around plastic piping. Anyone got any good idea how much I could/should shorten a dipole like this or got a better idea. Ideally I'd like a monoband no-tune antenna to save having to carry ATU and SWR meter. A counterpoised 1/4 wave hanging out the window would probably be pretty good but how many hotels have opening windows these days!!

Just how many hotel TVs and phones does 5W take out????

Brian G0UKB (and very very occassionally KB8YKJ/P)

Brian Jones
Java Technology Centre
HURSLEY MP 146 Ext 246896 (+44 1962 816896)
BEJONES AT WINVMD bejones@hursley.ibm.com

Date: Wed, 18 Mar 1998 08:12:23 -0700
From: "James R. Duffey" <ji3m@maxwell.com>
To: qrp-1@Lehigh.EDU
Subject: [6271] FoxHunt In the Rain and Green
Message-ID: <v03007803b1358eb2e726@[192.31.66.158]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

All - The hunting was pretty good last night, despite my poor antenna situation and QRN. I sat down at the rig with a pint of Guinness at 0015 and checked out the band conditions. QRN was moderate to bad, s7 to s9, but the antenna loaded OK. You may recall mother nature and moisture laden slush and snow had turned my delta into a "perverted wye" on Sunday . One end of the delta was still held up in its original position, the other end was about 10 feet lower than normal and the center span had broken. Half of the bottom of the antenna and part of the center span was lying on the roof. Normally I would have tried to fix it, but the roof is still very slick.

I am very busy at work and home so I can't post my entire list for a few days. A quick count shows about 61 contacts, so I bettered my last time out, 54. My strategy of straddling sunset worked, I worked lots of close in stuff early, and after the sun set the skip went long and I snagged; NY, CT, VA, and BC among others. Gary K50N, was the closest, he is only about 10 miles away as the crow flies.

I always seem to snag VE7CQK at the end and tonight was no exception.

I worked Tim, K50I, in Las Cruces, normally that is not trivial on 40M, but he had a copiable signal about sunset here. I need to check my logs to make sure but I think that Tim and I had a grand slam, I worked him both times I was the fox, and he worked me both times he was the fox. Us NMers have to stick together.

The QRN was very bad at times, S9+20 dB, due to precipitation static from hard rain. Fortunately this only lasted for 10 to 15 mins at a time. The pile up sounds real weird under these circumstances by the way; everybody has an identically poor signal to noise ratio and it is almost impossible to pick out a call in the pileup.

I had to QSY once due to QRM. I tried to live with it for a while, but it got impossible for me to handle towards the end and I looked for a clear frequency. I went from 7038 to about 7043, which was nice and clear for a while and then the SSBers moved in and I had to move a bit. It was real hard at the end.

I finished up my pint an hour and 15 minutes into the hunt and noticed my CW capabilities had dropped a notch or two. Probably due to fatigue. 8^)
Maybe the keyer started acting up. I forget. After the hunt I went down

stairs and had a nice New England Boiled dinner for St. Patrick's Day Supper; Corned Beef, Cabbage, Carrots and potatoes all boiled together.

I worked Doc twice; once at the beginning, and once at the end. I guess Doc's bride took him out to that Irish pub and after he got back he forgot he had worked me. =8^)

I will post the list in a few days. - Duffey KK6MC/5

James R Duffey KK6MC/5 DM65
30 Casa Loma Road
Cedar Crest, NM 87008

Date: Wed, 18 Mar 1998 09:43:02 -0600
From: Mike - W0TMW <crucis@sky.net>
To: NF9K@aol.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [6272] Re: toroid wire
Message-ID: <350FEB86.C43EBC8B@sky.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I saw some at RS yesterday. The package contained three spools, each spool a different color.

Mike - W0TMW

NF9K wrote:

>
> All,
> I am wrapping the toroid for the 38S 5W mod, and have no magnet wire
> sitting around. I went to my local Radio Shack and found that they had none. i
> couldn't even find where it should be, as if they don't stock it anymore. They
> did have "30-guage wrapping wire". Is this stuff suitable for winding
> inductors?
>
> thanks in dvance for the advice,
> Joel, NF9K

--

=====

Mike Watson, W0TMW

QCWA Mbr# 28651, MidContinent Chapter #35

Raymore, Missouri, USA Grid: EM28st, ARS# 352, QRP-L# 1849
http://www.sky.net/~crucis E-mail: crucis@sky.net

Date: Wed, 18 Mar 1998 07:50:46 -0800
From: Vic Rosenthal <rakefet@rakefet.com>
To: bill@willapabay.org
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [6273] Re: SG-2020 Delivery Schedule Delayed, AGAIN!!!
Message-ID: <350FED56.5CE718AC@rakefet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Bill Todd wrote:

>
> However, consider this: What would happen if SGC rushed out a bunch of
> radios that were NOT perfect, in an attempt to fulfill the orders that are
> presently on hand?
>
> Answer: with the speed of the Internet (and the QRP-L), all the negative
> reports on the SGC rig would destroy any future efforts by SGC in the
> amateur market. It's that simple.

Boy, I second this view emphatically! Sometimes it's a feeding frenzy, and it can
be really unfair to the companies involved. As others have pointed out, going
from
prototype to production is not as easy as it may look.

Now, you don't see me sending messages every couple of weeks asking WHY MY K2
ISN'T
READY YET, HUH, do you?

Vic K2VC0

Date: Wed, 18 Mar 1998 11:09:20 -0500
From: "W. D. (Doc) Lindsey" <70511.3041@compuserve.com>
To: "INTERNET:ji3m@maxwell.com" <ji3m@maxwell.com>
Cc: QRP-L Discussion Group <QRP-L@Lehigh.EDU>, "W.D. (Doc) Lindsey/K0EVZ"
<70511.3041@compuserve.com>
Subject: [6274] FoxHunt In the Rain and Green
Message-ID: <199803181111_MC2-3734-949A@compuserve.com>

MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

Jim:

Nope....had to do with heavy QRM from the pack at the beginning which covered your QSL :-(. Decided there was no choice but to go back to be *certain*. Twice before this season thought I had snagged pelts, only to miss the final log. Please accept my apologies for having been forced to do so, both to you and all hunters. Definitely was not intentional.

BTW being married to a wonderful, fun-loving Irish lass does have its own rewards on St. Patty's Day.

It's been a great FOX season this year. Thanks one and all for a fun time, and especially for hunting K0EVZ earlier! Best wishes.

72/73,
--Doc Lindsey/K0EVZ qrp-l 861 Grid EN34
MWBC
519 16th Street SE
Rochester, MN 55904
507-289-5108 (evenings)

Date: Wed, 18 Mar 1998 11:40:07 -0500
From: Michael Neverdosky <MichaelN@cycat.com>
To: qrp-l mailing list <qrp-l@Lehigh.EDU>
Subject: [6275] Re: SG-2020 Delivery Schedule Delayed, AGAIN!!!
Message-ID: <350FF8E7.F70ACE83@cycat.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

OTOH

Some companies wait untill the product is developed and ready to go before they start advertising and taking orders.

An example is Burt Rutan and the Rutan Aircraft Factory, they didn't even announce that the Long-EZ was being developed untill they had debugged the prototype and

were ready to sell plans.

After much grief with a first run TS-120, I will never again buy a radio that has not been on the market for at least 1 year.

If the internet is so powerfull at killing weak products, why is M\$ still selling so much software????

michael N6CHV

rakefet@rakefet.com wrote:

>

> Bill Todd wrote:

> >

> > However, consider this: What would happen if SGC rushed out a bunch of
> > radios that were NOT perfect, in an attempt to fulfill the orders that are
> > presently on hand?

> >

> > Answer: with the speed of the Internet (and the QRP-L), all the negative
> > reports on the SGC rig would destroy any future efforts by SGC in the
> > amateur market. It's that simple.

>

> Boy, I second this view emphatically! Sometimes it's a feeding frenzy, and it can

> be really unfair to the companies involved. As others have pointed out, going from

> prototype to production is not as easy as it may look.

Date: Wed, 18 Mar 1998 11:48:45 EST

From: EBikales <EBikales@aol.com>

To: qrp-l@Lehigh.EDU

Subject: [6276] MFJ DSP

Message-ID: <d2ae9f5e.350ffaef@aol.com>

Mime-Version: 1.0

Content-type: text/plain; charset=US-ASCII

Content-transfer-encoding: 7bit

Hello gang,

I have an MFJ-784 tunable filter, with the updated chip and all docs. It works fine and is in perfect shape cosmetically, but I'd rather have a slick 30 Meter QRP Xcvr. Anyone up for a trade??? Drop me an email at:

EBikales@aol.com

72,

Eric AC6NT

Date: Wed, 18 Mar 1998 09:05:29 -0800
From: George Zafiropoulos <georgez@quickturn.com>
To: qrp-1@Lehigh.EDU
Subject: [6277] Wilderness Sierra For Sale
Message-ID: <3.0.5.32.19980318090529.00826100@mailhost.quickturn.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I have a Wilderness Sierra for sale. I built the kit and it is in excellent condition and works great. The radio includes...

Wilderness Sierra - built
KC2 Keyer/Freq. Counter/S-Meter/Wattmeter board - Built and installed
Noise blanker - unbuilt
40m module built and tuned up.
80m/30m/20m modules partly built

I love this little radio but I need the money to buy another toy.
Not sure what the going rate is but the whole thing cost me about \$400 +

'73 de George KJ6VU
georgez@quickturn.com

Date: Wed, 18 Mar 1998 17:35:30 GMT
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: PDouglas12@aol.com
Cc: qrp-1@Lehigh.EDU
Subject: [6278] Re: A visitor from the West to NE QRP
Message-ID: <199803181735.RAA28952@chuck.dallas.sgi.com>

Preston et.al.,

My formal apologies for the delayed posting to the group.
I knew that this week would have me out of circulation,
thus the quite zone time.

Thanks to Preston and his family for their New York hospitality
for the quick trip in and out for the New England QRP meeting.

My thanks to the New England group and the work they are doing in keeping the spirit of QRP alive and well in that part of the world. There was a great turnout and as is usually the case at such a gathering, lots of show and tell equipment. Even some future projects and kits possible from what I saw and discussed with some individuals. It is my hope that they do offer their ideas and work for the rest of the world to share and enjoy.

Thanks to Mike and the ARRL staff for the use of the HQ and if anyone on the list gets an opportunity, be sure to attend the annual meeting at ARRL HQ with the New England club.

I have gotten the pictures from Preston, but will not be able to post until Saturday when I get back to Dallas.

I had hoped to get time for the MD gang, but time will not allow it. I'm working on a new course and it takes a lot of time up front.

Howdy to the New England crowd and again thanks.

FYI

Chuck Adams K5FO Dallas, TX CP-60
<http://reality.sgi.com/adams> adams@sgi.com

Date: Wed, 18 Mar 1998 11:43:57 -0600
From: Tellefsen Bob-CNSE97 <cnse97@lmpsil02.comm.mot.com>
To: ji3m@maxwell.com
Cc: QRP-L list <QRP-L@Lehigh.EDU>
Subject: [6279] Re: KK6MC/5 Fox
Message-ID: <351A2DFAE256D111883A0060B06B16624AA807@s-il02-j.comm.mot.com>
MIME-Version: 1.0
Content-Type: text/plain

Very glad to work you last night, Jim.

It looks like I may have worked you twice. The first time was approx. 0129. I thought I had caught you, but between QRM and QRN, I wasn't certain. Then, when you acknowledged and said TU Ron, I wondered if I had doubled with someone else.

So I went and had dinner to give the pack time to settle, then came back

during your last half hour for another try. Got you clear and confirmed that time.

Anyway, greatly appreciated.

72, Bob N6WG and Ol' Kenwood

Date: Wed, 18 Mar 1998 12:44:31 EST
From: ARDUJENSKI <ARDUJENSKI@aol.com>
To: qrp-l@Lehigh.EDU
Subject: [6280] RIGS: SIMPLE WORKS TOO!
Message-ID: <be1b8f6d.35100801@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

I was involved in searching for that perfect rig. I had recently picked up a TEN TEC CENTURY 21 and love it but found it difficult to pull out weak signals or signals out of crowded bands. A fellow QRPer sold me an AUTEK QF-1 audio filter. That filter has allowed me to not only pull signals out of a pileup but I have found I can now work stations that I could not even hear before. Phenomincal may not express my comments fully on the results. Stations that would be a 229 or less are now 559 or better. I sure wish I had this set up as a FOX.

I am sure there are other filters that work just as well. The point I hope to make is that for a small investment some of you may find a simple but satisfying solution to spending hundreds of dollars. Hope this may be of some value too you new folks.

Have a super week! Alan KB7MBI

Date: Wed, 18 Mar 1998 11:58:45 -0600
From: Tellefsen Bob-CNSE97 <cnse97@lmpsilo2.comm.mot.com>
To: mikemo@ibm.net
Cc: QRP-L list <QRP-L@Lehigh.EDU>
Subject: [6281] Copperweld wire
Message-ID: <351A2DFAE256D111883A0060B06B16624AA80F@s-ilo2-j.comm.mot.com>
MIME-Version: 1.0
Content-Type: text/plain

Mike:

I really recommend against using copperweld wire. If you get any break in the copper cladding (and it is very thin) the steel core rusts away in nothing flat.

I live on the edge of San Francisco Bay, where we have both salt air and smog as well. Makes for some very corrosive air at times.

I had a G5RV antenna years ago, fed with true open wire line--bare copperweld wires separated by plastic spacers. One day I couldn't get the antenna to load, so went out to look at it. The feedline had rusted away into pieces. It looked like some kind of tattered lace, just hanging in broken sections.

Avoid copperweld.

Hard drawn copper wire would be most likely to survive your environment.

73, Bob n6WG

Date: Wed, 18 Mar 1998 11:03:07 -0700 (MST)
From: Joe Gervais <vole@primenet.com>
To: qrp-1@Lehigh.EDU
Subject: [6282] Re: SG-2020 Delivery Schedule Delayed, AGAIN!
Message-ID: <199803181803.LAA19157@usr02.primenet.com>

Howdy,

> Boy, I second this view emphatically! Sometimes it's a feeding frenzy,
> and it can be really unfair to the companies involved. As others have
> pointed out, going from prototype to production is not as easy as it may
> look.

Reminds me of my first company - The Big Guys In Suits would come to the engineers and ask us how long it would take to get a project done. We'd give accurate, honest answers, which they didn't like. So they started going to the marketing group instead to get their product release dates. (Collective groan here....) Despite our protests, they insisted on using those deadlines.

When the dates from marketing proved to be terribly wrong, pie-in-the-sky pipe dreams and deadlines slipped,

the Big Guys In Suits got mad at... you guessed it...
us engineers. The day I quit was a happy one indeed.

Maybe I'm too pessimistic these days but whenever I
hear a scheduled release date, I ignore it. When I hear
"now shipping", my ears perk up. :)

> Now, you don't see me sending messages every couple of weeks asking WHY
> MY K2 ISN'T READY YET, HUH, do you?

That's 'cause they haven't missed the Dayton deadline. :-) :-)
Can't wait for the K2! Or the .44-mag, the DDS critter
from SWL, or... Geez, there goes this year's Christmas
budget. :)

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"Ricola!" -- Pinky and the Brain

Date: Wed, 18 Mar 1998 10:15:25 -0800
From: Andreas Junge <andreas@atltech.com>
To: qrp-l@Lehigh.EDU
Subject: [6283] RE: New 38-S: the 44-MAGNUM
Message-ID: <01BD5256.C507F4E0.andreas@atltech.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

On Tuesday, March 17, 1998 10:45 PM, Paul Harden [SMTP:na5n@rt66.com] wrote:

>
> The 44-MAGNUM 30M QRP kit -- the upgraded 38-Special
> (To be available summertime, 1998 - see below)
> -----

Will there be a custom enclosure like the one for the original 38-Special ?

72, Andreas, KF6NEB

Date: Wed, 18 Mar 1998 12:12:59 -0600
From: Tellefsen Bob-CNSE97 <cnse97@lmpsil02.comm.mot.com>
To: tahrens@inetport.com
Cc: QRP-L list <QRP-L@Lehigh.EDU>
Subject: [6284] Re: IC706MK II
Message-ID: <351A2DFAE256D111883A0060B06B16624AA818@s-il02-j.comm.mot.com>
MIME-Version: 1.0
Content-Type: text/plain

Tim, your post wasn't clear whether this was a new purchase or an "experienced" box.

My first instinct would be to get hold of the service manual. Some of your observations sound to me like an alignment problem.

Anyway, food for thought.

73, Bob N6WG

Date: Wed, 18 Mar 1998 14:08:55 -0500 (EST)
From: "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
To: ARDUJENSKI <ARDUJENSKI@aol.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [6285] Autek QF-1A, one of my all-time favorites
Message-ID: <Pine.LNX.3.95.980318140633.8429B-100000@w3eax.umd.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I've used one on nearly every rig I've owned. I've compared them to DSP units and, truth be told, the QF-1A filters just SOUND better.

Sure, at narrow bandwidths they ring, but the ability to sculpt the bandpass and NOT use brick wall filtering is both pleasing to the ear and serves to enhance the ability to hear what would be out-of-band signals, but are now merely somewhat attenuated.

Besides, you can buy them for \$45 at hamfests.

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
* 6m 82 grids on 8w * DXCC WAS WAC * QRP-L #147 * QRP ARCI #9054 *
* <http://w3eax.umd.edu/~ham> * ARRL Life Member /Laurel ARC/UMARA *
*** 301-549-1022 h 301-982-1015 w *** 35 wpm HF mobile CW Neon ***

On Wed, 18 Mar 1998, ARDUJENSKI wrote:

> I was involved in searching for that perfect rig. I had recently picked up a
> TEN TEC CENTURY 21 and love it but found it difficult to pull out weak signals
> or signals out of crowded bands. A fellow QRPer sold me an AUTEK QF-1 audio
> filter. That filter has allowed me to not only pull signals out of a pileup
> but I have found I can now work stations that I could not even hear before.
> Phenominal may not express my comments fully on the results. Stations that
> would be a 229 or less are now 559 or better. I sure wish I had this set up as
> a FOX.
>
> I am sure there are other filters that work just as well. The point I hope to
> make is that for a small investment some of you may find a simple but
> satisfying solution to spending hundreds of dollars. Hope this may be of some
> value too you new folks.
>
> Have a super week! Alan KB7MBI
>

Date: Wed, 18 Mar 1998 12:20:47 -0600
From: Tellefsen Bob-CNSE97 <cnse97@lmpsil02.comm.mot.com>
To: jmbrown@edge.net
Cc: QRP-L list <QRP-L@Lehigh.EDU>
Subject: [6286] Re: QRP Trivia
Message-ID: <351A2DFAE256D111883A0060B06B16624AA821@s-il02-j.comm.mot.com>
MIME-Version: 1.0
Content-Type: text/plain

Jerry:

I was involved with OSCAR III in '64-'65, and wrote my senior paper on the history of the OSCAR Project up to that time.

I think I remember seeing the schematic in the big box of documents I got to use, but I don't recall ever seeing it published. Calibration information was published so observers could count the HIs and figure the temperature. Don't recall if battery voltage was in there too or not.

73, Bob N6WG

Date: Wed, 18 Mar 1998 09:46:20 -0800
From: dave_epps@juno.com

To: qrp-1@Lehigh.EDU
Subject: [6287] RUFZ cw
Message-ID: <19980318.102455.9422.1.dave_epps@juno.com>

Ref: post High speed CW again
108 wpm. That's hard for me to imagine.
Anyway! I downloaded the RUFZ program and it seemed to run in
a win-95 dos window ok, but quickly pointed out how miserable my
callsign skills are. Looks like a good program to improve that.
dave ab5pc fresno, ca.

You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at <http://www.juno.com>
Or call Juno at (800) 654-JUNO [654-5866]

Date: Wed, 18 Mar 1998 13:43:40 -0500
From: Ed Tanton <n4xy@bellsouth.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [6288] Re: SG-2020 Delivery Schedule Delayed, AGAIN!!!
Message-ID: <3.0.1.32.19980318134340.00e89510@mail.atl.bellsouth.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi Folks... I have kept a low profile on this issue since I have disagreed
with the main theme all along: "another delay... ya..da.da..da.da". Guess I
have to say a little something now. I have been there, on the R&D end of a
small-medium sized electronics company trying to introduce new products.
Yes, they took their shipping dates VERY seriously, and yes, they made
99/100 of them. But these were typically aerospace products, selling for
thousands of dollars, and I think the guys I worked with were largely
geniuses-honestly. I was amazed time and again at their ability to predict
the date a new design would be shipping, and be correct. But even their
dates did slip occasionally... as many others do. Now, that said...

The '2020 is only \$625. It has the features of rice boxes selling for 3
times its. It is not a simple redesign of the QRP+, it is-for all intents
and purposes-a NEW transceiver. I ordered mine early once I saw the specs,
features, and pictures, because I do not believe they will be selling for
\$625 for very long at all; and because it looks like everything I want in a
multiband, multimode HF transceiver, period. I emailed SGC when the last
flap got going, and told them most of what I'm saying here, and said I
hoped they would ignore the gripes, and NOT rush the unit to production.

The disappointment felt by those 'anticipating the new rig' is not only found in ham radio.

I find that when people have surgery it is best to give longer *estimates* about when people may return to work.

Invariably they will be ready before the estimated time. They are usually happy and feel good that they did so well.

If however I would underestimate the time; they would become anxious and keep asking how much longer.

After fifteen years I found that there are two types of people. The ones that want to heal quickly and return to work and the ones that don't ever want to return to work.

If the manufacturers were listening to the groans they would overestimate the development times and periodically post the factors involved.

This would increase the chances of making people happy.

As we all know you can't make everyone happy.

73,

Jim N2GO
The Buffalo QRP CONNECTION
ARCI #9013 QRP-L #381
Life member ARRL
jskalski@acsu.Buffalo.EDU

Date: Wed, 18 Mar 1998 19:05:07 +0000
From: ea8yu Goran <rodriguez@jet.es>
To: qrp-l@Lehigh.EDU
Subject: [6290] Squeeze mode A or B?
Message-ID: <3.0.5.32.19980318190507.007b75b0@jet.es>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I am starting to learn squeeze keying with a Kitano key as an alternative to the slapping left and right mode. Should I choose to learn A or B mode?

As I understand it:

A mode sends ._._ as long as you keep the key pressed and finishes the last dit or dash when you let loose.

B mode does the same thing but then adds one more element of the opposite kind when letting go. Timing seems to be more critical. When sending "a" you must let go very early during the dash, otherwise an "r" will be sent.

Saludos
Goran ea8yu

Date: Wed, 18 Mar 1998 14:10:48 EST5EDT
From: "CHARLES LESKIE" <CLESKIE@um-f1.umd.umich.edu>
To: qrp-1@Lehigh.EDU
Subject: [6291] Re: Autek audio filter
Message-ID: <185F6643BE0@um-f1.umd.umich.edu>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

I too use an Autek QA-1 filter on my rigs, and I must agree that it is a razor sharp filter. My only problem with is is the loss of audio thru the filter. On my rig, I lose about 50% of my audio thru the filter. Is this normal, or is it just my setup?

Chuck KG8ZH

Date: Wed, 18 Mar 1998 14:11:08 EST
From: DENNIS MO <DENNISMO@aol.com>
To: qrp-1@Lehigh.EDU
Subject: [6292] Re: RUFZ cw
Message-ID: <4832fbaa.35101c4f@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Dave ab5pc fresno, ca. wrote in a message dated 98-03-18 13:55:02 EST.

<< Ref: post High speed CW again
108 wpm. That's hard for me to imagine.
Anyway! I downloaded the RUFZ program and it seemed to run in

a win-95 dos window ok, but quickly pointed out how miserable my
callsign skills are. Looks like a good program to improve that.

dave ab5pc fresno, ca.

>>

Just my two cents worth... RUFZ worked just fine on a Windows NT 4.0
workstation, too. And I agree with Dave... This program, more like a game,
should really help you build up your head copying of callsign as well as
improve your overall CW head copying skills!

73's de Denny / KF6NJQ

Denny / KF6NJQ

FISTS # 4570 / QRP-L # 1359

10-X # 69158

HAMing It Up Everyday In Goleta, CA

Section: Santa Barbara

Long: 34.437 N Lat: 119.868 W

Grid: DM04BK

Date: Wed, 18 Mar 1998 14:21:27 -0500

From: Zack Lau <zlau@arrl.org>

To: qrp-l@Lehigh.EDU

Subject: [6293] Re: 4/98 QST QRP trivia

Message-ID: <35101EB7.3D96@arrl.org>

Mime-Version: 1.0

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

1. Yes--Zack W1VT

Date: Wed, 18 Mar 1998 12:23:12 +0000

From: Roger Hightower <n7kt@earthlink.net>

To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

Subject: [6294] Re: New 38-S: the 44-MAGNUM

Message-ID: <350FBCB0.491D5F42@earthlink.net>

Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [6296] Re: Squeeze mode A or B?
Message-ID: <Pine.SOL.3.96.980318120435.21621A-1000000@vortex>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 18 Mar 1998, ea8yu Goran wrote:

>
> I am starting to learn squeeze keying with a Kitano key as an alternative
> to the slapping left and right mode. Should I choose to learn A or B mode?

Hi Goran,

I think Chuck, K5F0 is the best one to answer this question! :-)

73, Ron, SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

Date: Wed, 18 Mar 1998 13:28:08 -0700
From: David Whipple <busmana@xmission.com>
To: qrp-l@Lehigh.EDU
Subject: [6297] [Fwd: Code practice Oscillator]
Message-ID: <35102E58.3AF79A74@xmission.com>
MIME-Version: 1.0
Content-Type: multipart/mixed; boundary="-----E4A6E1C8BEBD08D5AA513CB2"

This is a multi-part message in MIME format.
-----E4A6E1C8BEBD08D5AA513CB2
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

-----E4A6E1C8BEBD08D5AA513CB2
Content-Type: message/rfc822
Content-Transfer-Encoding: 7bit
Content-Disposition: inline

Message-ID: <35102DFE.B4C6D043@xmission.com>
Date: Wed, 18 Mar 1998 13:26:38 -0700

From: David Whipple <busmana@xmission.com>
X-Mailer: Mozilla 4.04 [en] (Win95; I)
MIME-Version: 1.0
To: qrp-1@Lehigh.EDU
Subject: Code practice Oscillator
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Does anybody know where I can find a simple schematic for a code practice oscillator? I have found several kits, but would prefer to get my own parts. I am new to electronics, so either a schematic or a "common sence" way of building one would be appreciated.

Thanks

A new (soon-to-be) QRP operator

-----E4A6E1C8BEBD08D5AA513CB2--

Date: Wed, 18 Mar 1998 15:30:42 -0500
From: Bill Howell <bhowell@mail.utexas.edu>
To: qrp-1@Lehigh.EDU
Cc: csnyder@nextdim.com
Subject: [6298] Re: Audio thru PC speaker
Message-ID: <199803182030.PAA50766@nss4.cc.Lehigh.EDU>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Chuck Snyder (No_Call_Sign_Yet) Wrote:

" You recall I don't have a sound card in my 386SX. For some strange reason, my PC speaker doesn't work either. I checked for continuity and it checks out as okay".

Chuck... you may need speak.exe... it allows audio to play through the PC speaker.
As I recall, it was easy to install.

If you need more info, email me.... the speak.txt file which explains it, is a bit large to post here.

You can find a download location by going to:

<http://ftpsearch.ntnu.no/> and searching for speak.exe.

72,

Bill Howell
University of Texas at Austin
Performing Arts Center
Electronic Maintenance
N5AL0 QRP-L #415

Date: Wed, 18 Mar 1998 21:38:31 -0800
From: Stefan Bauer <bauer@student.uni-kassel.de>
To: qrp-l@Lehigh.EDU
Subject: [6299] A NEVER ENDING STORY... THE SG2020 delivery date...
Message-ID: <3510AF57.9AAE4251@student.uni-kassel.de>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

good day dear reader.

to me all this is just like standup comedey.
what should we learn from all these delivery delays?
well, for me, as been somebody from abroad, following the SG2020
delivery poker,
this looks very much unprofessional and not HAM-like.
isn't this the sg2020 a pure commercial man pack radio, made for
commercial needs!
look at the power consumptions and the filtering!
the comments from qrp brewers here in dl on the rx filtering are very
disappointing.
i do not expect a well working rig for eu hf conditions, so i 100% pass
on this one and wait for the K2 been tested here in DL!
my HOPE for the K2 is to come out when it's done, not when the boss is
de.-comanding it!
if i have to, i wait an other year or more, at least i will have what i
want!
i just ordered a norcal40A & sierra yesterday, so my evenings are filled

for the upcoming spring. besides this i am bunkrupted, now... ;-)

sorry for telling my thoughts ---- NO WAY!

---steve ... building real rigs made from HAMS for HAM needs!!!! sri
fer typos..

```
=====
AX 25 : dl1fdf@db0vfk.#hes.deu.eu   | dl-qrp-ag GM | g-qrp 8769| qrp-1
252
e-mail: bauer@student.uni-kassel.de | 72 de steve DL1FDF -- DL/VY1QRP
=====
```

Date: Wed, 18 Mar 1998 14:42:03 -0600
From: "George T. Baker" <w5yr@swbell.net>
To: n4xy@bellsouth.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [6300] Re: Milestone now has Nye keys
Message-ID: <3510319B.22523017@swbell.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Ed,I taught myself the code back in 1945 with a homebuilt (of course!)
audio oscillator and a Speedex straight key. Still have it, and it still
works great, although it can't spell as good as in 1945!

--
72/73, George
Amateur Radio W5YR
QRP-L #1373
QRP ARCI #9583
AutoPOWER Systems
Fairview, TX

Ed Tanton wrote:

>
> Hi Marshall... just a comment: of all the keys I own, the simple
> EFJ/Nye/Speedex is THE best feeling straight key, period. I ran into a pair
> of them, NIB/surplus, from Lowell Thomas, still sealed in the MIL foil
> envelopes, and so got a good deal on them (his are gone.) Point is, at the
> price (\$20) I was just sort of adding to the 'collection"... and was amazed
> how truly good the one I opened 'feels'! I'm very glad to see you offering
> them.

> 73

```
> Ed Tanton      N4XY                      EMAIL: n4xy@bellsouth.net
> 189 Pioneer Trail
> Marietta, GA  30068-3466                TEL: (770)579-3933 V/MBX/FAX
> -----
> INTERESTS:   QRP      BoatAnchors  Test Equipment      Photography
> CW: 99.9%    Mercury Paddle # 0214      QRP to 150W: 95%
> ~~~~~
> "Think you can, think you can't: either way you're right!"      Henry Ford
> ~~~~~
```

Date: Wed, 18 Mar 1998 13:53:55 -0600
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: qrp-l@Lehigh.EDU, cqc@mtechnologies.com
Subject: [6301] New Tools from Milestone Technologies
Message-ID: <199803182052.NAA28827@edison.chisp.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

Milestone Technologies has just received a shipment of inexpensive tools--

3-1/2 Digit LCD Digital Voltmeter (DVM) \$14.95

Set of 6 Dental Picks \$7.95

Automatic Wire Stripper \$6.95

Adjustable Wire Stripper \$3.95

Standard shipping applies (\$5 per order for Priority Mail).

Images are on the web site at <http://www.mtechnologies.com/tools.htm> and you can use our secure credit card ordering facilities, or call 800-238-8205 to order by phone.

73
Marshall Emm
N1FN/VK5FN
n1fn@mtechnologies.com
Milestone Technologies
Software, kits, tools...

http://www.mtechnologies.com
(303)752-3382

--

Date: Wed, 18 Mar 1998 14:49:58 -0600
From: "George T. Baker" <w5yr@swbell.net>
To: ji3m@maxwell.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [6302] Re: FoxHunt In the Rain and Green
Message-ID: <35103376.3AE8F3E@swbell.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Jim, thanks much for my second Fox this year. You had an exceptionally strong signal in here and the cw operating was excellent. I hobbled the 765 Icom back down to 5 watts again and managed to work you off the end of the 40-meter EDZ antenna. Tried you on the vertical and the horizontal loop (cloudwarmer?) but you were stronger most of the time on the EDZ. I especially appreciate your taking the trouble to get my call correctly as W5YR and not W5CR as you first returned it.

I noted that you were working stations that were calling you on your frequency, so I called there too. If this is frowned upon, please let me know and I will be pleased to slide off a bit to one side or the other. I worked you within the first 15 minutes of the hunt, so maybe the traffic was light enough that you could handle the mob zero beat.

Anyway, another enjoyable and successful hunt courtesy of a great bunch of guys. And as a retired EE, I doubly enjoyed spending "our" holiday doing what we enjoy.

--

72/73, George
Amateur Radio W5YR
QRP-L #1373
QRP ARCI #9583
AutoPOWER Systems
Fairview, TX

Date: Wed, 18 Mar 1998 13:56:11 -0600
From: "Marshall Emm" <mgemm@mtechnologies.com>

To: Ed Tanton <n4xy@bellsouth.net>
Cc: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [6303] Re: Milestone now has Nye keys
Message-ID: <199803182055.NAA28916@edison.chisp.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

Hi, Ed--

>>good the one I opened 'feels'! I'm very glad to see you
offering them.
<<

Thanks! They are nice keys, and must remember to update the page
with the fact they they come with a TWO year guarantee!

Could I quote you on the web page? If not, no problem, but
testimonials from "real people" are helpful!

73
Marshall Emm
N1FN/VK5FN
n1fn@mtechnologies.com
Milestone Technologies
Software, kits, tools...
<http://www.mtechnologies.com>
(303)752-3382
--

Date: Wed, 18 Mar 1998 12:43:11 -0800 (PST)
From: Stanley Wilson <microres@crl.com>
To: DENNIS MO <DENNISMO@aol.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [6304] Re: RUFZ cw
Message-ID: <Pine.SUN.3.91.980318124137.1992B-1000000@crl5.crl.com>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I agreed great game, helps you understand why some qsl cards go unanswered.

After a couple of days it will increase your copying speed. It totals out after about 50 games so you need to save the zip file.

Date: Wed, 18 Mar 1998 12:45:54 -0800 (PST)
From: Stanley Wilson <microres@crl.com>
To: CHARLES LESKIE <CLESKIE@um-f1.umd.umich.edu>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [6305] Re: Autek audio filter
Message-ID: <Pine.SUN.3.91.980318124349.1992C-100000@crl5.crl.com>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Might want to look at the signal on a scope. While it may appear to lose 50% of the level to your ears, I expect it is much less.

A good xtal filter also appears to do the same thing, but really doesn't.

The basic design for the filter has been around since the 50's.

Date: Wed, 18 Mar 1998 15:06:54 -0600
From: Mike Souhrada <wb9iog@revealed.net>
To: ARDUJENSKI@aol.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [6306] Re: RIGS: SIMPLE WORKS TOO!
Message-ID: <3510376E.522F@revealed.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

ARDUJENSKI wrote:

>

> I was involved in searching for that perfect rig. I had recently picked up a
> TEN TEC CENTURY 21 and love it but found it difficult to pull out weak signals
> or signals out of crowded bands. A fellow QRPer sold me an AUTEK QF-1 audio
> filter. That filter has allowed me to not only pull signals out of a pileup
> but I have found I can now work stations that I could not even hear before.
> Phenominal may not express my comments fully on the results. Stations that
> would be a 229 or less are now 559 or better. I sure wish I had this set up as

> a FOX.
>
> I am sure there are other filters that work just as well. The point I hope to
> make is that for a small investment some of you may find a simple but
> satisfying solution to spending hundreds of dollars. Hope this may be of some
> value too you new folks.
>
> Have a super week! Alan KB7MBI

Alan

Thanks for the testimonial now mabe someone will buy my QF-1? \$25 + shipping.

BTW a bit surprised the C 21 doesn't work better. Possibly it needs alignment? Mine works fine.

Mike

Le Claire, Ia

Date: Wed, 18 Mar 1998 10:57:09 -0500
From: "Bob Kellogg" <ae4ic@nr.infi.net>
To: "qrpforum" <qrp-l@Lehigh.EDU>
Subject: [6307] 40M KnightSMiTe
Message-ID: <199803182109.QAA25689@mailhost.infi.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Gang,

Doug Hauf, KE6RIE, has been experimenting with his KnightSMiTe on 40M. I've been getting so many inquiries about a 40M KnightSMiTe that I thought I'd let you know what he's doing and ask him to make a final report to all when he's satisfied with the results.

Doug changed only 3 parts.

- (1) 7.040 HC49 crystal replaced the 3.6864 crystal. (crystal obtained from NorCal)
- (2) L1, 100uH, replaced with 18uH. (regular inductor standing on it's end)
- (3) L4, 2.2uH, replaced with 1.0uH. (regular inductor standing on it's end)

He reports about 5 KC of bandspread.

Now, Doug says he's not checked the output for cleanliness, and wants to change the inductors to surface mount. So, there may be some refinement

necessary, but for all of you guys salivating for a 40M KnightSMite, here is a starting place.

Let's hear about mods for other bands, too!

Many thanks to Doug for taking the first steps.

CUL,
Bob Kellogg, AE4IC, Greensboro, NC
Probably, but not nececelery. -- Benny Hill

Date: Wed, 18 Mar 1998 15:13:06 -0600
From: "Tim, KD5CKP" <Prog922@worldnet.att.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [6308] Re: [Fwd: Code practice Oscillator]
Message-ID: <351038E2.144F@worldnet.att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I am not aware of one on the web, but Radio Shack has a book "Engineer's mini notebook - Communications Projects" it has an ocsillator and other CW apps.

Tim, KD5CKP

David Whipple wrote:

>
> -----
>
> Subject: Code practice Oscillator
> Date: Wed, 18 Mar 1998 13:26:38 -0700
> From: David Whipple <busmana@xmission.com>
> To: qrp-1@Lehigh.EDU
>
> Does anybody know where I can find a simple schematic for a code
> practice oscillator? I have found several kits, but would prefer to get
> my own parts. I am new to electronics, so either a schematic or a
> "common sence" way of building one would be appreciated.
>
> Thanks
>
> A new (soon-to-be) QRP operator

Date: Wed, 18 Mar 1998 16:40:28 -0500
From: Rick McNelly <72507.235@compuserve.com>
To: qrp-1@Lehigh.EDU
Subject: [6309] Caps in Sierra Band Modules
Message-ID: <199803181643_MC2-3743-573A@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

Hello All,

I'm ordering another band module for my Sierra and want to change C47, 48, and 49 to decrease loss as per the mods I have seen posted.

Silver micas are hard to find, RF Parts and Circuit Specialists list them but they have min orders. Is there another affordable source for these things? Mouser lists practically any value needed in axial polystyrene with no min order.

Does it make a difference if the caps are silver micas or polystyrene?

72/73's,

--Rick, KE4IZH

Chesapeake, Va.

MP2.1K

Date: Wed, 18 Mar 1998 17:19:21 -0500 (EST)
From: kd4zkw <kd4zkw@amsat.org>
To: QRP-L <qrp-1@Lehigh.EDU>
Subject: [6310] Versa tuner and qrp...
Message-ID: <Pine.LNX.3.95.980318171609.2996F-100000@danial.dialisdn.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I have an mfj versa tuner, and want to use it with a milliwatt kit I constructed. I have the output on the versa tuner meter, but it's too small to drive the swr portion

of the meter. Is there a way I can set it so I can use it with the qrp rig ? I'm going to order a tuner for qrp soon, and won't have difficulty anymore, but was hoping someone could help me get the versa tuner to tune up qrp. I saw the article about using a tuner with a functional swr meter, but this requires at least 10 watts to drive the meter. Ok, 72/73.

```
-----  
| Curtis D. Levin kd4zkw      | kd4zkw@amsat.org | QRP-L #1488 |  
| cdlevin@dialisdn.com | http://www.diaisdn.net/user/cdlevin |  
| kd4zkw.ampr.org [44.98.2.22] Exp Ax25/Linux DPTNTv1.1a3 |  
| amprnet e-mail : kd4zkw@w4bkx.ampr.org |  
-----
```

```
-----  
  
Date: Wed, 18 Mar 1998 13:59:15 -0800 (PST)  
From: "John D. Erskine" <yd794@victoria.tc.ca>  
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [6311] Suggested $$ for an Argosy 505?  
Message-ID: <Pine.GS0.3.95.iB1.0.980318134833.1397E-100000@vtn1>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII
```

Hi folks,

Boy this is a busy list! In spite of being on several prolific lists my msg count really shot up when I signed on this one *g*
I really like what I see, generally a very nice tone. Of course, qrp, few are SHOUTING about whatever. It's been a few years since I made it to Dayton and it's not likely to happen this year due lack of \$\$. '90 - '93 inclusive I found the QRP hospitality suite/meeting room to be a friendly hall of sanity. Not really settled in the apt. or finished job hunting so plans to complete the 40-9er, overhaul the HW-8, build the.....are on hold. Sigh.

On the point of the subject, I may be able to pick up an Argosy 505, what I wondered is what might be considered a fair price range, dependent upon condition, add-ons, etc.

Thanks, 72 John

J.D. Erskine

VE00TC VE60TC VE30TC

yd794@victoria.tc.ca

Date: Wed, 18 Mar 1998 17:04:43
From: Steven Weber <kd1jv@moose.ncia.net>
To: qrp-l@Lehigh.EDU
Subject: [6312] Re: High flying antenna
Message-ID: <3.0.3.16.19980318170443.212f2250@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>The moral of the story - I'm not quite sure, but I hope I don't see too
>many beams with pigeons flapping away impaled on the elements!

I bet the wind had blow the antenna off from the proper direction and the
pigeon just happened to knock it back the right way!

New way to make a rotor?

72,

Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

Date: Wed, 18 Mar 1998 17:33:35 -0500 (EST)
From: kd4zkw <kd4zkw@amsat.org>
To: QRP-L <qrp-l@Lehigh.EDU>
Subject: [6313] opinions on kits
Message-ID: <Pine.LNX.3.95.980318172722.2996G-100000@danial.dialisdn.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hey all. I have a decision to make soon. I am going to be
building a kit for 40 meters. I have come to a point where
I'm down to about 3 kits. The tac-1, the ark-40, or the
OHR-100A. Three things I need to know.

How hard/easy are these kits to build in comparison with
each other ?

Which is the best of the three ?

Are there any tunable kits for 40 meters that I've overlooked ?
Looking for something I hope to not have to build a case for.

optional questions:

These come with internal keyer options. Are internal keyers better than external keyers ? I have an MFJ pacesetter. Seems to work fine for what I need, but would just a paddle with an internal keyer work better ?

Is the OHR-100a hard to change over to general band after being built for novice ?

```
-----  
| Curtis D. Levin kd4zkw      | kd4zkw@amsat.org | QRP-L #1488 |  
| cdlevin@dialisdn.com | http://www.diaisdn.net/user/cdlevin |  
| kd4zkw.ampr.org [44.98.2.22] Exp Ax25/Linux DPTNTv1.1a3 |  
|          amprnet e-mail : kd4zkw@w4bkx.ampr.org          |  
-----
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Date: Wed, 18 Mar 1998 14:28:26 -0800
From: Conrad <radman@best.com>
To: "'busmana@xmission.com'" <busmana@xmission.com>, Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [6314] RE: [Fwd: Code practice Oscillator]
Message-ID: <01BD527A.233670A0@radman.vip.best.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: quoted-printable

Check out "73" magazine, March, '98 pages 64-66: "Don't Leave Home = Without It." It's a wallet-sized code practice oscillator/continuity = tester based on a music module IC. Has piezo/spkr, 1.5 volt coin cell = batt. Author says he built it for \$4.07 in parts. Schematic is in the = magazine.=20

72 - Conrad - nn6cw.

-----Original Message-----

From: David Whipple [SMTP:busmana@xmission.com]
Sent: Wednesday, March 18, 1998 12:28 PM

To: Low Power Amateur Radio Discussion
Subject: [Fwd: Code practice Oscillator]

<< Message: Code practice Oscillator >>

Date: Wed, 18 Mar 1998 14:41:50 -0800
From: Ward Hill <w_hill@ns.net>
To: qrp-1@Lehigh.EDU
Subject: [6315] QRP DX
Message-ID: <l03130304b135fd1e86a3@[207.159.15.37]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi there,

I am just haveing a ball with my NORCAL 40A. It has been almost 25 years since I have worked any DX. While these are not any big thing to most, I am loving it. JA2CGH, 4F3CV and VE7SRB are now in my log. The 40A and my 40MMD (Micky Mouse Dipole) at 25 feet are doing fine by me. TOO COOL!!!!

72,

Ward, WA6FUH
w_hill@ns.net
WA6FUH@KM6PX.#NCA.CA.USA.NOAM

Date: Wed, 18 Mar 1998 17:34:02 -0800
From: LYN WILLIAMS <designserv@ipass.net>
To: kd1jv@moose.ncia.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [6316] Re: High flying antenna
Message-ID: <3510760A.49B05FB1@ipass.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Steven Weber wrote:

> >The moral of the story - I'm not quite sure, but I hope I don't see too
> >many beams with pigeons flapping away impaled on the elements!
>
> I bet the wind had blow the antenna off from the proper direction and the
> pigeon just happened to knock it back the right way!
>
> New way to make a rotor?
>

AT LAST -- A HOMING ROTOR!

Date: Wed, 18 Mar 1998 14:51:29 -0800
From: dave_epps@juno.com
To: qrp-1@Lehigh.EDU
Subject: [6317] Cheap DMM
Message-ID: <19980318.145140.3374.2.dave_epps@juno.com>

Harbor Tools now has the Cen-Tech DMM on sale for \$6.95 until Apr 1.
dave ab5pc fresno, ca.

You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at <http://www.juno.com>
Or call Juno at (800) 654-JUNO [654-5866]

Date: Wed, 18 Mar 1998 18:08:37 EST
From: K5BDZ <K5BDZ@aol.com>
To: ARDUJENSKI@aol.com, qrp-1@Lehigh.EDU
Subject: [6318] Re: RIGS: SIMPLE WORKS TOO!
Message-ID: <980e8874.351053f7@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Alan

Thanks for putting it so simply and effectively!!!!
Simple audio filter circuits that allow a variable feature have given us this
ability for years. But it takes someone to just try them first and excitedly

report their findings such as you have done to get folks attention.
Hopefully we have a few listeners out there.
Bill K5BDZ

Date: Wed, 18 Mar 1998 18:25:18
From: Steven Weber <kd1jv@moose.ncia.net>
To: qrp-l@Lehigh.EDU
Subject: [6319] Making dead lines, Dilbert in real life
Message-ID: <3.0.3.16.19980318182518.26e7fe1e@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Many moons ago, I worked for a very small electronics outfit, where we made
pression strain gauge (pressure sensor) calibration equipment. Anyway, we
had sold a fancy unit that would take a 10 mv full scale signal and display
it to one part in a million, a good trick back in 1975 or so.

Of course, we ran into problems but still had to meet a specific shipping
date in order to get paid. (Goverment work, ya know) So, we shipped an
empty cabinet, but which had a line cord, to the customer. They plugged it
in, it didn't work, so they shipped it back for "repair". We got paid,
finished the job and everyone was happy.....

72,
Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

Date: Wed, 18 Mar 1998 18:16:57 EST
From: K5BDZ <K5BDZ@aol.com>
To: kd4zkw@amsat.org, qrp-l@Lehigh.EDU
Subject: [6320] Re: Versa tuner and qrp...
Message-ID: <1b53a17a.351055eb@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

To convert the MFJ or almost any other tuner / SWR meter to read QRP levels,
change out the silicon diodes (1N914 etc.) in the RF sensor circuit and put in
germanium diodes such as the 1N34A or 1N270. Then it should work just fine.
Bill, K5BDZ

Date: Wed, 18 Mar 1998 18:12:40 EST
From: K5BDZ <K5BDZ@aol.com>
To: CLESKIE@um-f1.umd.umich.edu, qrp-1@Lehigh.EDU
Subject: [6321] Re: Autek audio filter
Message-ID: <576a9cf6.351054eb@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Must be your set-up...impedence mismatch or something....Bill, K5BDZ

Date: Wed, 18 Mar 1998 18:33:06 -0500
From: Dale Scott <dcscott@us.ibm.com>
To: <qrp-1@Lehigh.EDU>
Subject: [6322] Fluke RF Probes - - The BEST deal yet!!!
Message-ID: <5030100018684886000002L062*@MHS>
MIME-Version: 1.0
Content-Type: text/plain; charset=iso-8859-1
Content-Transfer-Encoding: quoted-printable

As most of you are aware, Radar Electric in Seattle has been selling Fluke
85-RF probes for \$19.95. Out of the original 110 or so they have about=10
left. They are a great probe and well worth the money. Yesterday I made yet
another trip down there to pick one up for a friend (they are coming out of the
woodwork - friends that is) and had a long talk with Kevin. He has located
300+ surplus but unused Fluke 82 RF probes. These have the same specs =
as the
85-RF but an older style packaging. He is selling them for \$9.95. For=that
price I don't think you can go wrong.

If you are interested contact Kevin at Radar (206) 282-2511. If you have any
questions about the probe that I might be able to answer email me. Yes=
- I
picked one up and I've also had Fluke fax me the spec sheet on it.

Dale C. Scott
IBM -- Engineering Technology Solutions
(206) 587-2784 8/277-2784

Internet: (work) dcscott@us.ibm.com
(home) dcscott@ibm.net
OV/VM: dcscott@ibmusm54

=

Date: Wed, 18 Mar 1998 18:34:16 EST
From: DENNIS MO <DENNISMO@aol.com>
To: w5yr@swbell.net
Cc: qrp-1@Lehigh.EDU
Subject: [6323] Re: Milestone now has Nye keys & Spelling..
Message-ID: <5f7b4a7a.351059fa@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Hi George...

I work with PC's all day long - I'm a PC support type person.. you have a problem ..I fix it! About the only time I write anything without a PC is when I use a post-a-note. And If I could get those darn little things in my PC printer I'd do it!

I'm relatively new to Amateur radio and when I bought my MFJ keyer and paddles a few months ago I look all over and thru every catalog that I could get my hands on for a spell checker.. Hey, we are nearing the 21th century aren't we? CW is really fun but "IT" assumes that the operator can spell! Bad assumption - in my case - hi hi.
My saving grace is that hams abbreviate in very strange ways...ie. gud for good. I can live with that.....

Hey - maybe there is a market out there for a new gizmo - we hams certainly are not shy about buying "new" gizmos.....!

nuf is 'nuf -

73's de Denny / KF6NJQ

Denny / KF6NJQ
FISTS # 4570 / QRP-L # 1359
10-X # 69158
Promise Keeper

HAMing It Up Everyday In Goleta, CA

Section: Santa Barbara
Long: 34.437 N Lat: 119.868 W
Grid: DM04BK

Date: Wed, 18 Mar 1998 19:46:19 -0500
From: "Bob Edwards, W4ED" <w4ed@flash.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>, Gary Drennan
<GMAN3067@ix.netcom.com>
Subject: [6324] Novice/Tech+ Sprint
Message-ID: <35106ADB.4F0ECB20@flash.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Where'd they go ??

It was like a regional playoff game where quarter-back
and full-back, on both teams, were missing at kick off.

We really need to motivate the QRP N/T+, next time.
Cam & ARCI have put together an event tailored for
N/T+, that encourages N/T+ fun, activity, growth.

Thanks to those N/T+ that did operate, each one I
heard did a very good job & hope you all had a lot
of fun with the pile ups. Also hope you contacted
several other N/T+ to rack up the points.

Here's my stats for 4 hours:

13 QSOs
75 QSO points
525 total points.

two of the 13 were Tech+

80m : CT
40m : MA, NY, TN, WI
15m : AB, AZ(2), CO(3), SK

--

Bob 72/73

<http://www.qsl.net/w4ed>
W4ED nr Atlanta @EM73wt

...."QRP", more from less....

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End of QRP-L Digest 1033
